Croonian Lectures

ON THE

EVOLUTION AND DISSOLUTION OF THE NERVOUS SYSTEM.

Delivered at the Royal College of Physicians,

BY J. HUGHLINGS JACKSON, M.D., F.R.S.,

FELL. ROY. COLL. PHYS.,

PHYSICIAN TO THE HOSPITAL FOR THE PARALYSED AND EPILEPTIC AND TO THE LONDON HOSPITAL.

LECTURE II.

MR. PRESIDENT AND GENTLEMEN,—For incidental reference in this lecture, I will state what I believe to be the hierarchy of nervous centres, which accords with the doctrine of evolution. I used to arrange them according to the morphological divisions of the nervous system—spinal cord, medulla oblongata, &c. I now arrange them on an anatomico-physiological basis—that is, especially as to degree of indirectness with which each represents the body, or part of it. The lowest motor centres are the anterior horns of the spinal cord, and also the homologous nuclei for motor cranial nerves higher up. They extend from the lowest spinal anterior horns up to the nuclei for the ocular muscles. They are at once lowest cerebral and lowest cerebellar centres; hence lesion of them cuts off the parts they represent from the whole central nervous system. I am ignoring the cerebellar system. The lowest centres are the most simple and most organised centres; each represents some limited region of the body indirectly, but yet most nearly directly; they are representative. The middle motor centres are the convolutions making up Ferrier's motor region and the ganglia of the corpus striatum. These are more complex and less organised, and represent wider regions of the body doubly indirectly; they are re-representative. The highest motor centres are convolutions in front of the so-called motor region. I say so-called, as I believe, and have urged for many years, that the whole anterior part of the brain is motor, or chiefly motor.[1] I speak more in detail of this in another lecture. The highest motor centres are the most complex and least organised centres, and represent widest regions (movements of all parts of the body), triply indirectly; they are re-re-representative. That the middle motor centres represent over again what all the lowest motor centres have represented will be disputed by few. I go further, and say that the highest motor centres (frontal lobes) represent over again, in more complex combinations, what the middle motor centres represent. In recapitulation there is increasing complexity, or greater intricacy of representation, so that ultimately the highest motor centres represent, or, in other words, coördinate, movements of all parts of the body in the most special and complex combinations. It is needless to give the scheme of sensory centres. The main conclusions are (1) that the highest (chiefly) sensory centres, parts behind Ferrier's sensory region, and also the highest (chiefly) motor centres, parts in front of the so-called motor region, make up the physical basis of consciousness; and (2) that just as consciousness represents, or is, the whole person psychical, so its anatomical basis (highest centres) represents the whole person physical, represents impressions and movements of all parts of his body; in old-fashioned language, the highest centres are potentially the whole organism. States of consciousness attend survivals of the fittest states of centres representing the whole organism.

I have several times insisted that the symptomatology of all nervous diseases is duplex, that in every case there is a negative, and that there is also a positive, element. I shall further illustrate this by certain cases of insanity. I ought to have mentioned before that Dr. Monro many years ago pointed out that in insanity there is both a negative and a positive element. Dr. Mortimer-Granville, who has for some years applied the doctrine of dissolution, uses the term "denudation," and takes note of the "exposure" of the lower layers, which I call the lower levels of evolution remaining. I consider post-epileptic states, which are, scientifically regarded, some cases of insanity; for they are, however slight or however transitory, departures from normal mental states. I wish to show three things:—1st, that after epileptic fits of different degrees of severity there are different "depths" of dissolution, and, consequently, different "shallows" of evolution remaining; 2nd, to try to account for the existence in some of the cases of increased excitability of the nervous arrangements of the different lower levels of evolution remaining. In this double attempt I shall make use of a principle essentially stated long ago by Laycock, but much more explicitly by Anstie, and later by Thompson Dickson; 3rd, that negative lesions of the highest centres cause paralysis.

It is well known that some epileptics, after their fits, are maniacal. The condition is called "epileptic mania," but it should be called "epileptic unconsciousness with mania." Plainly the condition is double; there is a negative and there is a positive element. Since the fit is over, and as the patient remains unconscious, there is of necessity on the physical side loss of function of some of the highest nervous arrangements of his highest centres—let us say, of the highest two layers. The co-existing mania is, I contend, the outcome of greatly raised activity of the next lower level of evolution remaining, the third layer, which is normal, except for hyper-physiological activity. But now comes the question, Why is an unconscious man furiously active? Why, on the loss of function of the highest two layers, is the next, the third, layer in the state of hyper-physiological activity spoken of? In order to consider this question methodically I must begin by speaking of the prior epileptic paroxysm

An epileptic paroxysm depends upon a sudden and excessive discharge or liberation of energy beginning in some part of the highest centres.[2] There is, in other words, a "physiological fulminate"; certain cells by abnormal nutrition (pathological process) gradually attain very high tension,—high instability, which is an hyper-physiological condition,—and suddenly liberate a large quantity of energy, and then gradually re-attain high instability. The point I wish particularly to urge is that not only do those highly unstable cells discharge by "downward" lines towards the parts of the body they especially represent, but that they also discharge laterally by "cross lines," and overcome the resistance of healthy, comparatively stable, collateral nervous arrangements of the same general rank, each of which then discharges downwards. Thus partly from the primal discharge, and much more from the secondary discharges of healthy nervous arrangements—there is an enormous energy—liberation towards the periphery. In illustration, let us suppose that the Navy Board—highest navy centres—consists of twenty-four members, each one of whom governs the whole of the Navy, through the intermediation of middle and lowest officials. We try to illustrate two things: (1) that destruction of a small part of the highest centres produces very little effect, whilst (2) sudden and excessive discharge of such small part produces, although indirectly, an enormous effect. If one of the twenty-four members gives up his duties, the whole Navy administration is very slightly defective throughout; there being compensation by greater activity of some of the remaining twenty-three members; this is analogous to destruction of a small part of the highest centres. It is notorious that a small part of the brain—a small part of the highest centres—may be destroyed without any striking symptoms; compensation is practically perfect. The case analogous to the epileptic fit is when one of the twenty-four highest Navy officials becomes occasionally insane. Then, by issuing foolish orders to lower officials, "discharging downwards," he produces wide-spread and yet slight disturbance in the Navy. But, by wrongly advising his colleagues, "discharging collaterally," he leads them to issue foolish orders to lower officials; leads them to "discharge downwards." Thus, by a multiplication of foolish orders, the whole Navy is severely and universally "convulsed." The officials who, in the case of loss of one of their colleagues, work more to compensate that loss, are compelled, when one becomes insane, to co-operate in his excess. I beg particular attention to the term "co-operation in excess." It is, so to speak, compensation in-

[1] "Facts seem to show that the fore part of the brain serves in the motor aspect of mind, and we may fairly speculate the posterior serves in the sensory."—Brit. Med. Jour., March 6th, 1869.

[2] It must be clearly understood that I am not speaking of epileptiform seizures; they depend on sudden and excessive discharges beginning in some part of the middle centres—so-called motor region—centres of a lower degree of evolution.

BEST COPY AVAILABLE

verted; both have to be carefully considered on any scheme of localisation.

At length we come to the condition when the epileptic fit is over. It is commonly said, however, of epileptic mania, that it sometimes occurs in, or rather that it replaces, an ordinary epileptic paroxysm. Further, what I shall shortly speak of as the first depth of dissolution effected by—remaining after—an epileptic discharge would, I believe, be considered by most medical men to be part of an epileptic paroxysm. I do not accept these hypotheses, but if they were verified, dissolution would still be exemplified, although by a different process. I will state a counter hypothesis, and leave it to my hearers to judge whether or not it accords with the facts.[3] The view I take is that the sudden and excessive discharge in an epileptic paroxysm produces exhaustion of nerve tracts which have been travelled by excessive currents in that paroxysm. I will illustrate by a simple case—an epileptiform seizure. A man has convulsion of the left leg, followed by temporary paralysis of that limb. It will be agreed upon that in such a case there is disease in some part of the cortex in the right middle region of the brain (middle motor centres)—say a tumour. And, since the event outside is excessive, it is obvious that the corresponding event inside is excessive, discharge of nerve-cells near the tumour. Further, in order that the central discharges or "explosions" inside, primary and secondary, may "get at" the muscles outside, the nerve currents developed must travel a particular route—passing down the internal capsule into the opposite lateral column of the cord, they will next overcome and discharge certain anterior horns (some lowest centres), and ultimately by peripheral nerves get at the muscles; there is excessive activity from cortex discharging to muscles convulsed. The explanation suggested (Todd and Alexander Robertson) of the temporary post-epileptiform paralysis,[4] is that, after the excessive "exercise" of central nerve-fibres during the epileptiform seizure they remain for a time exhausted. Confirmation of this hypothesis seems to be given by, in some cases, the existence of exaggerated knee-jerk and foot-clonus,[5] in the stage of post-epileptiform paralysis. Beevor has found the same after some epileptic seizures.[6] Further confirmatory evidence is experimental. Franck and Pitres, for whose highly scientific work I have a most respectful admiration, found that after epileptiform convulsions induced in dogs the part of the cortex which had been artificially discharged remained for a time unexcitable.[7]

The generalisation arrived at is that a sudden and excessive discharge or sudden and excessive liberation of energy of part of the middle motor centres produces great activity, followed by exhaustion of other parts secondarily engaged. Besides the running down of—loss of energy of—the cells of the "discharging lesion," there is a far wider negative state from running down of the parts secondarily discharged, and from the exhaustion of central nerve fibres effected by these primary and secondary discharges.

Applying Todd and Robertson's hypothesis to the highest centres, we say that after an epileptic fit there is, according to its degree of severity, exhaustion or more or fewer "layers" in those highest centres. I believe there to be also some exhaustion of middle centres and of fibres in the lateral columns of the cord, and sometimes of some of the lowest centres. Here is an example of compound order. The range of exhaustion downwards will vary according to the severity of the discharge; we must bear in mind also another factor governing range, that the lower the centre the more organised it is, and thus that it will resist more and recuperate sooner. I neglect the implication of the lower centres. Now, manifestly returning to the case of epileptic mania, exhaustion of the highest two layers of the highest centres being a purely negative state, cannot account for the super-positive state, mania. Nothing cannot be the cause of something. I repeat that the maniacal actions are supposed to be the outcome of the activity on the lower level of evolution remaining—third layer—of nervous arrangements which, except for over-physiological activity, are healthy; that they are manifestations of the survival of the fittest states on the lower, but then highest, level of evolution. To show more particularly what is meant, we must speak of three degrees of exhaustion, three increasing depths of dissolution, which are effected by epileptic discharges of different degrees of severity, taking count of the corresponding three degrees of decreasing shallows of evolution. *First depth:* There is defect of consciousness, significant of dissolution of the topmost layer, along with the rise of a certain kind of ideation, significant of increased activity of the second layer. The double condition is roughly analogous to ordinary sleep with dreaming. *Second depth:* There is so-called loss of consciousness, significant of dissolution of the topmost and second layers, along with actions of more or less elaborateness (one example of which is post-epileptic mania), significant of increased activity of the third layer. The double condition is analogous to sleep with somnambulism. *Third depth:* There is coma, significant of dissolution of the first, second, and third layers, with which, seemingly, there is persistence only of vital operations, such as respiration and circulation, significant of retention of activity of the fourth layer. The double condition is analogous to deep slumber, to so-called dreamless sleep.

It will be seen that the opinion expressed is that in each case the lower level of evolution remaining—the then highest level—is of some part of the highest centres. Manifestly it is in the first depth. As to the second, it may be asserted that the lower level of evolution is made up of the middle centres. These centres, and after them the lowest, are in activity, of course; but are, I think, put in activity by what remains of the highest. I believe that in the third depth, the lower, then highest, level of evolution is in the highest centres, but do not undertake to defend this opinion. One thing to be insisted upon is that in each of these degrees there is a negative, and that there is a positive, and often a super-positive element. We must beware of the ordinary nomenclature: (post) epileptic mania is named after the positive element only; (post) epileptic coma is named after the negative element only. Negatively there are increasing degrees from defect, through so-called loss of consciousness, to coma, signifying three increasing depths of dissolution; positively, there are decreasing degrees from ideation through elaborate actions to mere vital operations, signifying three increasingly shallow levels of evolution remaining. (Later on I shall state a serious qualification.)

[The *first depth* was then remarked on. The ideation or "dreamy state" was usually called an "intellectual aura," and was by most physicians considered to be part of the paroxysm. Particular attention was drawn to the frequent occurrence of the "dreamy state," with, or after, movements of chewing or tasting, and sometimes of spitting—movements believed to imply an excitation of central gustatory elements.]

Second depth: There has been a stronger discharge, which has effected deeper exhaustion. Now, there is no ideation, at least none is remembered on recovery; but there are actions. There are really sub-degrees or sub-depths of the second depth, and no doubt of the first and third depths of dissolution; and correspondingly there are several sub-degrees of lower levels of evolution remaining. As to the second depth, there are symptomatically actions of different degrees of elaborateness from such highly special and complex actions as that of a fisherman unconscious after an epileptic fit occurring at dinner, pulling out a line from a reel, untying a knot, taking out a hook from his pocket, affixing it, and baiting it (doing all this pantomimically), down to such actions, if they deserve that name, as sprawling on the floor.

[Details were then given of very elaborate actions by an epileptic when unconscious after a fit; the case of the fisherman first spoken of will, however, serve for illustration.]

[3] I have been said to accept the doctrine of replacement—to believe that "psychoses" occur instead of ordinary epileptic paroxysms. In reality I entirely disbelieve that doctrine—I gave it up many years ago. I believe that all *elaborate*, suddenly occurring states in epileptics, whether they are to be called mental or physical, follow a paroxysm. The very title of a paper I published (West Riding Asylum Reports, vol. v., 1875, On Temporary Mental Disorders *After* Epileptic Paroxysms) shows this.

[4] A very valuable paper on paralysis after such seizures has been published by Dr. Dutil (Revue de Médecine, March, 1883).

[5] I published a case of this kind in the Medical Times and Gazette, Feb. 12th, 1881, On a Case of Temporary Left Hemiplegia, with Foot-Clonus and Exaggerated Knee-Phenomenon, after an Epileptiform Seizure beginning in the Left Foot.

[6] I have suggested that these increased "reflexes" are owing to loss of control, to over-activity of anterior horns (lowest centres) consequent on withdrawal of cerebral inhibitory influence. I now think it far more likely that there is exhaustion, not only of fibres in the lateral columns of the cord, as I suggested in the paper mentioned, but also, as Gowers has suggested, of inhibitory centres in the cord itself. Westphal and Gowers have pointed out that after some epileptic paroxysms there is temporary loss of the knee-jerk. Gowers suggests that in these cases the lumbar nuclei were exhausted; that the exhaustion was deeper than in cases where the knee-jerk is excessive.

[7] "Ce phénomène de l'épuisement cortical consécutif aux accès d'épilepsie partielle est très facile à constater."—MM. François-Franck et A. Pitres, Archives de Physiologie, Août 15th, 1883, No. 6.

BEST COPY AVAILABLE

Here was a second depth of dissolution, in which we say, speaking loosely, that there was exhaustion of the highest two layers of the patient's highest centres, answering to his loss of consciousness, answering, in other words, to his being "lost to his surroundings" (his not knowing that he was in the dining-room, &c.) So much for the negative element. We recognise, too, the positive element, lower level of evolution remaining, third layer, from activity of which he acted *en rapport* with other surroundings—acted as if he were on the river's bank. No explanation is adequate which does not account for the two diametrically opposite elements, not only for his ceasing to do this but also for his beginning to do that. Putting it in another way, that paient's post-epileptic state differed from his previous normal state by a *minus* and also by a *plus*. After the fit he was a different person, although in the same skin; or, as the phrase is, the post-epileptic patient "was not himself." There was too little of him in one way, and too much of him in another.

Not only in cases called epileptic mania, but in all degrees of post-epileptic actions, from such elaborate actions as those of the fisherman down to sprawling on the floor, the two diametrically opposite elements have, on any adequate hypothesis, to be accounted for.

I must now make some additional general remarks on evolution and dissolution. The doctrine of evolution implies the passage from the most organised to the least organised, or, in other terms, from the most general to the most special. Roughly, we say that there is a gradual "adding on" of the more and more special—a continual adding on of new organisations. But this "adding on" is at the time a "keeping down." The higher nervous arrangements evolved out of the lower keep down those lower, just as a government evolved out of a nation controls as well as directs that nation. If this be the process of evolution, then the reverse process of dissolution is not only a "taking off" of the higher, but is at the very same time a "letting go" of the lower. If the governing body of this country were destroyed suddenly we should have two causes for lamentation: (1) The loss of services of eminent men; and (2) the anarchy of the now uncontrolled people. The loss of the governing body answers to the dissolution in our patient (the exhaustion of the two highest layers of his highest centres); the anarchy answers to the no longer controlled activity of the next lower level of evolution (third layer).

Another way of stating the general principle involved (Anstie's principle), is that the over-activity in epileptic mania and in the other cases mentioned is not caused, but is permitted; on cutting across the pneumogastric the heart is not caused to go faster, but is permited to go faster. In other words, the lower level of evolution is not "goaded into activity," but is "let go." So we see that exhaustion of the highest nervous arrangements—two layers,—answers to negative affection of consciousness, and this exhaustion being, at the same time, a removal of control from the next lower level of evolution—third layer,—it springs into activity—is "let go." We stay to remark on some differences in the two depths. One great difference between them is that in the first the ideation is remembered, or of course we should know nothing about it. From the second (as in somnambulism) nothing is remembered. But it comes to be a question of importance, and of more practical importance than, at first glance appears, whether or not in the second depth there is some ideation in spite of the expression "loss of consciousness." That there is activity of some nervous arrangements of the highest centres, we are supposing of the third layer, is, I submit, quite certain. The question is this: Do states of consciousness attend that activity or not?

There will be two views on this matter. Let me return to the case of the fisherman, who pantomimically pulled out a line from the reel, &c., when "unconscious" after an attack. Had that man, who, on recovery, remembered nothing of his doings, any states of consciousness attending the nervous activities which were producing his elaborate actions? One view would be that the fact that the patient remembered nothing was proof that there were no mental states. Another view would be that the very elaborateness of the operation implied some co-existing states of consciousness. We must carry each view to its logical conclusion. Those who take the first view—nearly all medical men, I believe—must say that the patient was a mere machine—that having no consciousness, he was a mere automaton. I beg that it may be borne in mind that, otherwise stated, this view is *that elaborate and universal movements may occur without a trace of consciousness.* On the second view it would be admitted that the man was an imperfect automaton, he having lost the highest parts of his nervous machinery; but it would be asserted that some degree of consciousness *attended* activities of the nervous arrangements on the lower level of evolution remaining. Each of these two views has consequences, as we shall soon see.

Third depth: Supposing a severest discharge; when it is over the patient is comatose, lies motionless on his back, has seemingly no movements excepting "vital" movements, such as the respiratory and the circulatory.

Having so far very much neglected the distinction between mental and nervous states, I must now have special regard to it, the reason for which will soon appear. The current explanation of the post-epileptic comatose patient's immobility is that he does not move because he is unconscious. This I submit is a metaphysical explanation. We want, in scientific matters, realistic explanations.

My belief is that the post-epileptic immobility is paralysis. The objection which has been made to this statement is that, as a mere matter of fact there is no paralysis. If anyone means that there is no hemiplegia nor any other local paralysis, I entirely agree with him. What I contend for is that there is *some* universally spread paralysis. The facts are not in dispute; it is a question of their interpretation. All are agreed that the post-epileptic comatose patient does not move *when* unconscious; all that I dispute is that he does not move *because* he is unconscious. No man was ever unconscious without there being at the same time some physical change in at least the highest nervous arrangements of his highest centres. I contend that it is more realistic to put the patient's immobility down to the negative physical change in his nervous centres—to attribute the physical to the physical—than to the correlative negative mental state. In other words, I give a realistic explanation in place of a metaphysical one. I put this question, "If loss of consciousness were all, why should not the patient move as well as ever?" This question will not seem in the least degree strange to the majority of medical men, for, as I have pointed out, they positively assert that an epileptic maniac who manifests universal and exceedingly elaborate movements has no consciousness.

Let us look at two comparable sets of facts. If a man does not move his leg after a convulsion of that limb everybody declares that limb to be paralysed. But if a man, after an epileptic fit, which involves the whole of his body, does not move any of his limbs, his condition is not called paralytic; the explanation is given that the patient does not move because he is unconscious. Consistently with this view, one ought to say that the man who does not move his leg after an epileptiform seizure, has lost volition over it. Everybody sees this explanation to be purely verbal; but the explanation, which is identically the same in effect, that the man does not move because he is unconscious, does not jar on anybody's mind; being a familiar expression, it has a deceptive appearance of realism, but I contend that it is not realistic at all. Let us consider a greater range of cases from another point of view; I dwell upon this matter because it seems to me to be of vast importance to establish that negative states of the highest centres produce some universal or widely distributed paralysis of the body. I admit that part of the paralytic condition may be owing to exhaustion of elements of lower centres.

After a slight attack of epilepsy (petit mal) the patient declares himself to be "knocked up," "unfit for anything," &c. The explanation of this condition is given in popular language; the patient is said to be weak; but if the very same patient has an exceedingly severe fit, and if after it he does not move any way (except for "vital" movements), then his immobility is explained metaphysically. In the simple case instanced of paralysis of one leg after an epileptiform seizure the patient is declared to be paralysed. So that of the first a popular explanation is given; but, I would ask, What is "weakness" after an excessive nervous discharge but paralysis? Of the second a metaphysical explanation is given; but I contend that there is no reason why a patient should not move if loss of consciousness were all; it is not all. Of the third only is a thoroughly realistic explanation given. Are we to believe that local immobility after a local convulsion is paralysis, and that universal immobility after a universal convulsion is not paralysis, but that it demands a metaphysical explanation? Besides, supposing that the loss of consciousness does explain the immobility in post-epileptic coma, will it also explain the exaggerated knee-jerks and the foot-clonus described by Beevor? More than this, according to Beevor, there is after some epileptic attacks

transitory lateral deviation of the eyes. Does loss of consciousness account for this deviation? Is it not decisive evidence of at least some paralysis, especially as the eyes deviate from the side to which they were strongly turned in the prior paroxysm? Occurring in post-epileptiform paralysis such deviation would certainly be said to imply some paralysis. Occuring after an epileptic fit, it surely also means some paralysis. I shall speak of it again in my next lecture, when referring to some recent experiments by Ferrier and Gerald Yeo, on the frontal lobes which I call the highest motor centres. It may be said, "Your supposition that the universal immobility of a severe discharge is paralysis is discrepant with your explanation of the second degree of post-epileptic unconsciousness and mania. If you say that exhaustion of three layers is causative of some universal paralysis in post-epileptic coma, you must admit that in the post-epileptic mania exhaustion of two layers also entails some, if less, paralysis. You are bound to say that the epileptic mania has some universal paralysis, although at the very same time he is in a state of universal activity." Of course I do not endorse the absurdity that a man is perfectly paralysed all over, and that at the same time he is in movement all over. My contention simply is that in post-epileptic mania there is some degree of paralysis all over the body, or, more precisely, loss of some movements of all parts, and that at the very same time there is persistence and over-development of some other movements of all parts. To show that this is not an extravagance I would point out that loss of some movements of the whole of a part, with persistence of some other movements of the whole of that part, is an exceedingly common thing. Take the case of imperfect paralysis of an arm in ordinary hemiplegia, or after an epileptiform seizure. To say that the arm is "weak" is misleading. The patient has lost some movements of the whole of the limb, and yet retains some other movements of the whole of the limb. Often enough there is loss of some of the most "delicate" movements, with at the same time the retention of many "coarser" movements. Unable to button his shirt, the patient may be able to grasp strongly, or to strike a heavy blow. In some cases there is, if possible, further demonstration. An arm is permanently partially paralysed all over, loss of some movements of the whole of the limb, and yet that other movements of the whole of the limb remain is emphasised by the occurrence of severe convulsion of it, which is nothing other than a sudden excessive development of the movements remaining. Any adequate doctrine of localisation has to account for this. In chorea we find persisting paralysis, with over-movements of the same parts; what has been called loss or defect of voluntary coördination in this disease is indirect evidence of some paralysis. The involuntary disorder of coördination is owing to over-activity of movements left.

I contend that there is no difficulty whatever in conceiving, whatever difficulty there may be in believing, that the exhaustion of the highest layer, first depth, which defect of consciousness implies, is causative of a slight degree of paralysis "spread out thin" all over the body (called "weakness;") that exhaustion of two layers, second depth, which loss of consciousness implies, is paralysis spread out more "thickly" all over the body, notwithstanding that, from the raised activity of the third layer, other movements of all parts of the body may be in great excess, and that the immobility in post-epileptic coma is paralysed, spread more thickly still all over the body.

Since I say (1) that the highest centres are sensori-motor; (2) that negative affections of consciousness imply negative states of parts of the highest centres; and (3) that there is some defect of consciousness in every case of insanity, I ought to hold the opinion that, in every case of insanity, there is some degree, however slight, of universal or widely distributed paralysis,—sensory, or motor, or both. So I do. That I could not demonstrate its existence in many cases, I admit. I should expect there to be the least degree of negative affection of consciousness and correspondingly the least paralysis in cases of insanity where the accompanying positive element was very elaborate,—that is, on the physical side, when the dissolution was very shallow and the level of evolution remaining was very high. In cases of dementia, the patient's "lethargy" might be put down to his negative mental state,—a metaphysical explanation. I should call dementia the chronic analogue of what acutely is post-epileptic coma, and attribute the lethargy to the negative condition of more or less of the patient's highest centres implied by his negative mental state, and call the lethargy paralysis.

Paralysis is indirectly admitted in some cases of insanity (when its existence might be denied directly) in the assertions that there is loss of facial expression, difficulty of articulation, tremor of the limbs (indirect evidence of some paralysis), and shambling gait. Taking but one of these, surely loss of expression implies either loss of the most special or "delicate" facial movements, or continuous development of them (rigidity), or both. There is no abstraction "expression" to be lost. What we know of any healthy person's conduct is from his movements. Such symptoms as I have just enumerated are those I should expect from chronic negative lesions of parts of the highest motor centres. They exist in many cases of general paresis, which Crichton Browne has shown to be owing especially to disease extending from the front backwards in the brain, from highest motor centres towards middle.

Now for the "serious qualification" I spoke of. The following difficulty, taking the case of the fisherman, has to be met. There was so-called loss of consciousness, implying a deep dissolution, and yet his very elaborate doings implied a very high level of evolution remaining. I hold that in post-epileptic states there are local dissolutions, meaning that the post-epileptic exhaustion is in, or preponderates in, one cerebral hemisphere. Thus, whilst there is a low level of evolution in the highest centres of one-half of the brain, there is a perfect or very high level in those of the opposite half. If so, the discrepancy disappears.

[The lecturer then variously illustrated the assertion that all elaborate (positive) mental states in cases of insanity of every kind were the outcome of activities of healthy nervous arrangements on the lower level of evolution remaining. He believed that the patient suffering from delirium tremens saw rats, mice, &c., by agency of nervous arrangements which the pathological process had spared. He did not believe that a patient "heard voices" (words spoken), nor that a melancholic man framed the delusion that he was going to hell during the activity of nervous elements touched by any pathological process. He thought that in Anstie's principle lay the explanation, not only of these positive mental symptoms, but of the necessarily co-existing negative mental symptoms also.]

[He then spoke of the several factors in cases of insanity: 1. There are different depths of dissolution (both of uniform and local dissolutions) of the highest centre. This has just been illustrated by cases of local dissolutions, and might no doubt be illustrated by a parallel series of chronic cases of insanity by cases from those with very complex delusions down to cases of dementia, if the duplex symptomatology of each were noted. 2. The person undergoing the dissolution (young or old, educated or uneducated, intelligent or unintelligent, &c.) 3. The rate at which the dissolution was effected. He believed that the more rapidly control was removed the greater was the activity on the lower level of evolution remaining, contrasting in illustration the furious delirium of the epileptic maniac, who had undergone dissolution in a minute or so, with the quiescence of the senile dement who had undergone dissolution some thousand times more slowly (similarly for different cases of epilepsy). 4. The influence of external circumstances and local bodily states. Examples of the induction of very elaborate states of the highest centres (in the lower level of evolution remaining) by simple peripheral excitations were given by all writers on dreams. The lower level of evolution, then, in hyper-physiological activity allowed a wider irradiation to simple stimuli coming to it. "Hearing voices" might not necessarily imply any disease of part of any centres especially concerned with sounds or words. That particular mental abnormality might be determined in a patient reduced to a lower level of evolution, uniform or local, by some morbid state in the ear, auditory nerve, or in its nucleus acting on the lower level of evolution remaining].

RICHMOND WATER-SUPPLY. — On the 3rd inst., Major Tulloch, one of the inspectors of the Local Government Board, opened an inquiry respecting an application by the Richmond select vestry for power to borrow £2000 for water-supply works. After a lengthy discussion, it was decided to adjourn the proceedings till the beginning of next month. In the meantime, samples of water from the Petersham well and other sources are to be taken by Major Tulloch and analysed by Dr. Franklin and Angus Smith.

ON A RECENT IMPROVEMENT IN THE ASPIRATOR FOR LITHOTRITY.

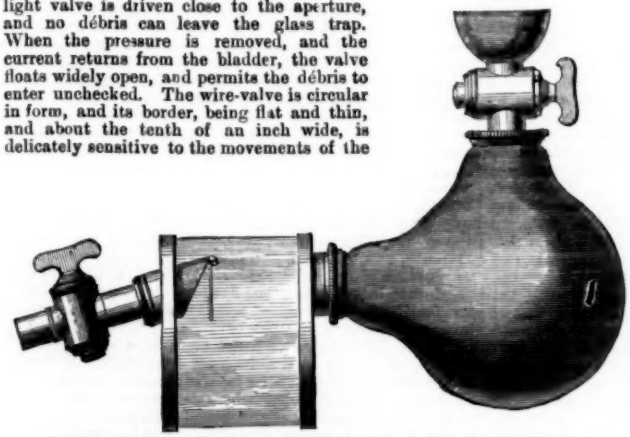
By SIR HENRY THOMPSON,

SURGEON EXTRAORDINARY TO HIS MAJESTY THE KING OF THE BELGIANS, PROFESSOR OF SURGERY AND PATHOLOGY TO THE ROYAL COLLEGE OF SURGEONS OF ENGLAND, CONSULTING SURGEON TO UNIVERSITY COLLEGE HOSPITAL, EMERITUS PROFESSOR OF CLINICAL SURGERY, ETC.

LAST autumn I made an addition to my aspirator, which appears to be useful. It consists in a light, loosely-hanging valve of fine wire attached by a simple hinge to the end of the evacuating-tube, which terminates within the glass trap of the instrument. When pressure is made on the indiarubber globe, and the current flows by the evacuating-catheter into the bladder, this light valve is driven close to the aperture, and no débris can leave the glass trap. When the pressure is removed, and the current returns from the bladder, the valve floats widely open, and permits the débris to enter unchecked. The wire-valve is circular in form, and its border, being flat and thin, and about the tenth of an inch wide, is delicately sensitive to the movements of the current, and responds to the slightest impulse of the hand on the indiarubber globe. But I am quite satisfied that with my last published aspirator, as well as with the form now described, no débris returns to the bladder if the instrument is properly used, when of course the valve is unnecessary. Few persons are aware that very slight but quickly made pressure on the globe, sufficing to transmit only six or eight drachms of fluid into the bladder, generally removes more débris than a powerful impulse which transmits at one act all the fluid contents of the globe, or nearly so. When employed in the manner last-named, the valve becomes useful, and only then is it required.

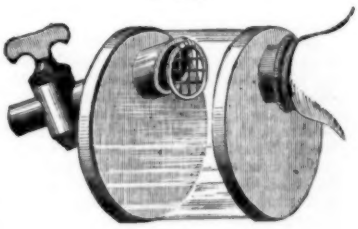
As to the present instrument itself, the form is simple; not far removed from the original pattern of Clover, but with the useful addition of a funnel and stopcock at the upper part of the globe, to facilitate the act of filling with water, as well as the escape of air. Moreover, the glass trap is easily disengaged from the globe, by which means the valve, which is sometimes liable to be partially blocked, as when much mucus and fine débris are present, can be easily cleaned. At the same time, this blocking of the wire-grating of the valve in no way interferes with its competency in action. The entire instrument is shown by Fig. 1. It is necessary that the end of the evacuating tube within the glass trap should have the angular form represented, so that the lower end of the valve, when undisturbed by current, should not close the orifice, but hang at a considerable distance therefrom, as seen in the figure. In Fig. 2 the glass trap is presented in a diagonal view, to show the construction of the valve, as described above.

FIG. 1.



Aspirator with glass trap, the section of which is oval, with the long diameter vertical; the valve hanging in the position it assumes during operation, when the liquid is quiescent.

FIG. 2.



Wimpole-street.

ON THE

INFLUENCE OF SMALL-POX HOSPITALS.

By EDWARD T. WILSON, M.B.OXON., F.R.C.P.,

PHYSICIAN TO THE CHELTENHAM GENERAL HOSPITAL.

No. IV.

IN my previous papers I have dealt with such of Mr. Power's arguments in favour of "distal aerial infection" as can be met on statistical grounds, if, indeed, statistics can seriously be brought to bear on numbers so small and insignificant. One line of reasoning, however, still requires careful consideration, for Mr. Power lays much stress upon it, and depending as it does on individual opinion, there is the more difficulty in assessing its real value. In every epidemic of small-pox it is found that a certain percentage of cases cannot be accounted for by any known contact with persons or things infected with the disease. Dr. Dudfield tells us[1] that whether in the neighbourhood of a small-pox hospital, or far removed from its influence, he has found this proportion to be some 50 per cent. In Mr. Power's "outburst," however, in 1881, thirty-two persons within "the special area" were infected between Jan. 12th and 17th, and of these twenty-three could not, after close inquiry, be connected with any definite or known cause for their illness. Are we at once to conclude, with Mr. Power, that these cases are "not to be explained by reference to the usual methods of small-pox spreads"? or that "at this particular moment some heretofore unrecognised factor of epidemic small-pox had probably been in operation"? The members of the Hospitals Commission exercise a wise caution in their reply, and "conceive it to be very unsafe to assign a case of small-pox to any cause which is not acknowledged to be effective in its nature and to have actually existed in the particular case, only because we cannot assign it to any other. Sometimes indeed it may be said that personal communication is absolutely impossible, but, as a general rule, the occasions of such communication between man and man are so various, so many are forgotten, so many concealed, so many unknown or unthought of, that we cannot safely use negative evidence on such a point for the establishment of a theory, unless it can be obtained on a large scale and with a uniform direction."[2] It will be necessary, however, to pass in review, as briefly as may be, the opportunities afforded by the ordinary operations of a small-pox hospital such as Fulham for infecting the surrounding population, for it is upon a close examination of these during the "infection days," Jan. 12th to 17th, 1881, that Mr. Power bases his opinion that they are inadequate to account for the *tertium quid*, the twenty-three untraced cases of the subsequent "outburst," and for circumstances which appeared to him "hardly intelligible without some hypothesis of conveyance of infection through the atmosphere." It is important to notice here the very fair but striking admission made by Mr. Power himself that the graduated distribution of disease round small-pox hospitals is as explicable by personal communication as by atmospheric dissemination; "with such a hypothesis," meaning that of dis-

[1] Hospitals Commission, Q. 4777.

[2] Ibid., p. xxiii.

semination, "equally as with a hypothesis of conveyance by human movements, the gradation of hospital influence from centre to periphery would be in complete accord."[3] The subtle dangers of small-pox infection have been graphically described by Mr. Power in a note to his Appendix M.[4] "Small-pox is a disease infectious beyond all others of its class. . . . . It is unsafe to deal with linen, blankets, bedding, &c., of small-pox patients in any but a separate laundry. Further, small-pox can without doubt be readily transmitted to others by persons who have been in close relation with the disease, though they themselves may not suffer from it; and similarly small-pox may be transmitted with comparative readiness in clothing, parcels, &c., from an infected to a previously uninfected dwelling. . . . . Again, the disease is capable beyond others of infecting susceptible persons after the briefest exposure to its contagion. . . . . Cases of small-pox themselves so little serious as to be mistaken for chicken-pox have in our ordinary experience the power of producing in unprotected persons severe attacks of the disease."

It will probably be thought by some persons that Mr. Power has here supplied a sufficient answer to the difficulties he has raised; but, bearing these in mind, let us now examine some of the possible, if not probable, modes by which small-pox might be spread in the immediate neighbourhood of small-pox hospitals. And first of the Hospital Staff. There are rules admirable and stringent enough for their guidance and control,[5] but these are not always adhered to, and if they were, danger must still remain. The nurses and ward servants, for example, are allowed "to go out every evening for two hours in addition to a half-day once a week,[6] the average leaving Fulham Hospital daily being eighteen; and Dr. Dudfield, in his report for 1882, states, on the authority of a patient in the hospital, "that her nurse, who went to evening parties, had made up bows for her dancing shoes while sitting at her bedside; and that before going to bed, on her return, she used to come into the ward to say 'Good night' without change of clothes." The non-resident officers (five), tradesmen, artisans (six), dustmen, and others, are also sources of danger.[7] At Homerton, Dr. Gayton had notes of six cases arising among men working in the hospital there, and five *employés* of tradesmen.[8] But perhaps the most active carriers of disease are the friends, coming themselves from infected quarters, who accompany patients to the hospital, inquire after them at the gates, or visit them in the wards when dangerously ill.[9] During the year 1881 Dr. Dudfield reports[10] that "177 patients 'dangerously ill' were visited by 233 visitors, who paid 440 visits. Seven visitors were subsequently admitted as patients to the hospital, and since the hospital was first opened in March, 1877, 479 patients 'dangerously ill' have received 1391 visits from 683 visitors, of whom 14 were subsequently admitted with small-pox." It must be borne in mind that many of these visitors are of the poorest class—so poor, indeed, that, as Mr. Browning tells us,[11] one poor woman having to see her husband at Deptford Hospital, "went wearing the jacket of one neighbour, the shoes of another, the petticoat of a third, and the skirt of a fourth, and she stayed the whole afternoon with her husband's head resting against her breast." This is by no means a rare occurrence.[12] "They visit these patients and come back to their own homes spreading the disease like wildfire."[13]

The well-known tendencies also among the poor to wash away the remembrance of unpleasant thoughts and scenes in the nearest public-house must not be left out of sight as a factor in small-pox spread in such a neighbourhood.

The ambulance routes were not marked by any undue incidence of the disease. Indeed, from Seagrave-road, with its thirty houses, each with an average of three families and a large number of children, and down which all the ambulances pass to the hospital, down which also 100 small-pox patients have walked to enter the wards, three cases of small-pox only have been received from March, 1877, to Dec. 31st, 1881, two in 1878, and one in 1879;[14] but any irregularities in the ambulance service would undoubtedly tend to intensify the spread of small-pox in the vicinity of a hospital, though not necessarily in the streets through which the ambulances pass. Mr. Sweeting tells of a man who caught small-pox from drinking beer in a public-house with the ambulance men; and it is no uncommon thing for friends to leave the ambulance and walk to the hospital, or wait at the nearest public-house till the ambulance returned minus the patient.[15] Mr. Archer Farr, medical officer of health for Lambeth, tells of a patient being driven through his district, and becoming refractory, the assistance of a passer-by was solicited; twelve days afterwards the eruption appeared on this man, and he died, and two or three other cases resulted from that one.[16] The drivers themselves are not always protected by vaccination, and a loitering ambulance is certain to become the focus of a wondering group of children. One case is given of a gentleman who contracted the disease from looking in at the window of one of these halted vehicles. But patients do not always arrive in ambulances. Omnibuses and hired vehicles are sometimes put in requisition, and in a very large number of instances the patients have walked, in some cases two and three miles, to hospital. Five of Dr. Dudfield's forty-one cases already alluded to in Ifield-road walked to Fulham, and Dr. Bridges reports[17] that at Stockwell 5 per cent. of the patients in 1878 walked in, and at Fulham in 1881 there were twenty such cases.[18] But even these are less dangerous than the patients who, from concealment or in ignorance of the nature of their disease, or from other causes, are treated or not treated at their own homes. Dr. Pink, medical officer of health for Greenwich, tells us:[19] "I found that as soon as these cases, from want of room in the hospital, were compelled to be treated at their homes the disease spread with much greater violence. . . . . In the month of May 114 cases were reported to me, which is a month after the hospital was full, and in the month of June 118 cases were reported, just double the number in March, when there were fifty-two cases. After the month of June the Convalescent Hospital was opened at Darenth, and in the month of July the cases were reduced, as reported to me, from 118 to 52, which, I think, is a very significant fact, showing the desirability of sending cases to hospital." In Kensington, Dr. Dudfield reports sixty-nine home-treated cases in 1881, and during the epidemics 1876 to June, 1880, there were 595 sent to hospital from his district, and 208 treated at home.[20] A most striking instance of the mischief likely to arise from such cases is related by Dr. Browning of Rotherhithe,[21] where sixteen, if not twenty, cases of small-pox arose in consequence of a patient refusing to be removed from his home. Dr. Dudfield, in his report for 1879, gives numerous cases where concealment has added fuel to the fire. A child dies at home, the death being registered as from "congestion of the lungs." Six cases of small-pox were shortly after removed from the same house. A fatal case in Fulham was disclosed by the certificate of death. This case gave rise to nine others in the some family (three fatal) and five among their friends, directly infecting four houses in four streets.

One other mode of spread, not peculiar to the neighbourhood of small-pox hospitals, but important as bearing on the question of Mr. Power's special incidence over the "special area," is the Sunday visiting of domestic servants in epidemic seasons. Six of Dr. Dudfield's twelve cases in the "special area" during Mr. Power's "outburst" were domestic servants. Other cases are given in his report for 1879, and in his evidence before the Hospitals Commission he states that about 25 per cent. of the cases in the last three years have been cases of domestic servants.[22] In one month alone in 1878 out of a total of twenty-seven cases, one to a house, no fewer than twelve were of female domestic servants,[23] and he remarks very cogently, "granting the hospital to have been the source of infection in these cases, by what law of selection can it be explained that one only of several servants and no other member of the household should have been stricken?" This catalogue of the modes in which small-pox is spread round small-pox hospitals is far from being exhaustive, and I might have mentioned infected letters,[24] stamps,[25] and cases sent out of hospital prematurely, but it will be more to the purpose if I quote some remarks of Dr. Makuna, once the medical superintendent of Fulham Small-pox Hospital, which seem to accentuate the remarks which have been made in their application to this hospital. The hospital, he says, writing in 1882, "was opened during a panic when only five wards were barely walled, the superior officers were quartered in the scullories, and the subordinates

[3] Ibid., Q. 909. [4] Ibid., p. 369. [5] Ibid., Q. 1260.
[6] Ibid., Q. 5213. [7] Ibid., Q. 5245. [8] Ibid., Q. 2654.
[9] Ibid., Q. 5220. [10] Report for 1881. [11] Hosp. Com. Rep., Q. 4219.
[12] Ibid., Q. 4222. [13] Ibid., Q. 4219. [14] Ibid., Q. 1290.
[15] Ibid., Q. 5239. [16] Ibid., Q. 1891. [17] Ibid., Qq. 617, 618.
[18] Cf. also Dr. Dudfield's Report for 1879.
[19] Rep. Hosp. Commission, Qq. 5306, 5308. [20] Report, 1879.
[21] Hosp. Com. Rep., Q. 4241. [22] Ibid., Q. 4729. [23] Report, 1878.
[24] Hosp. Com. Rep., Q. 2656, and Brit. Med. Journal, March 1st, 1884, p. 400. [25] Ibid., Q. 5218

in a ward. The washing of the staff was sent out, as the laundry was incomplete, and there never has been proper provision to wash the linen of the staff. Some of the staff slept outside. . . . . Cases of small-pox have occurred owing to these wants of precaution in the families of members of the staff and their friends year after year. For four years no sort of repairs, limewashing, painting, &c., of the buildings took place. . . . . The clothing of a patient has never been washed on his admission. The non-resident staff are obliged to work in the wards and among patients in their shirt sleeves, which part of the dress is never changed. . . . . Cases of small-pox have occurred among members of the committee and their households."[26]

Mr. Power, in his report, has most carefully endeavoured to assess the infection value of some seventy "occasions day by day for communication between the hospital and the district around it" during the infection days Jan. 12th to 17th of "his outburst" in 1881—or a total incoming and outgoing of 439, including the arrival and departure of eighteen ambulances,—but of this we would remark, in the words of the Royal Commission (p. xxv.): "It is very difficult to estimate the value of Mr. Power's analysis. . . . . We will only say that it is very careful, but that it must be accepted subject to all that we have said respecting the extent to which small-pox is capable of being propagated through unexpected and undiscernible channels."

(To be continued.)

AN OPERATION FOR HALLUX VALGUS.

BY ARTHUR E. BARKER, F.R.C.S. ENG.,
ASSISTANT PROFESSOR OF CLINICAL SURGERY AT UNIVERSITY COLLEGE, AND ASSISTANT-SURGEON TO UNIVERSITY COLLEGE HOSPITAL, ETC.

THE deformity hallux valgus is one for which it will probably be admitted a cutting operation is rarely demanded. In the first place the condition being one due in almost every case to ill-fitting boots, which force the great toe out of the line of its metatarsal bone into strong abduction, it is possible by proper attention to the shoeing of the patient, by methodical manipulation of the faulty toe, and by placing pads between the latter and its neighbours to bring it in most cases into a fairly comfortable position once more. Still every surgeon must meet from time to time with cases of this deformity which baffle all ordinary endeavours to bring about even a tolerable state of things, and where the great toe lying crosswise, either under or over its fellow, gives rise to such inconvenience, if not actual suffering, as practically to cripple the individual so affected. Under these circumstances patients are willing to undergo any treatment in order to be relieved, and will even urge the surgeon to amputate the offending member, which is interfering with all comfort in progression.

The following case will illustrate remarkably well the evils of this condition, and will serve also for the demonstration of a simple operation which was practised with perfect success for its cure.

X——, aged nineteen, was brought to me as an out-patient in November, 1882. He complained much of being crippled by the deformity of his toes. I found both feet to present the deformity in question acutely, but most marked on the right side, where the nail of the great toe lay under its fellow, its matrix being in a state of suppuration from the pressure and irritation, and the parts exquisitely tender. Various measures had been tried before I saw the patient to relieve him, attention being particularly directed to the inflamed matrix and ingrown nail. I did not anticipate much difficulty in relieving the patient, and treated him by cutting out the embedded portion of nail and dressing the ulcerating surfaces with antiseptic materials placed thickly between the toes. This, however, proved of no permanent benefit to the patient, for on trying to walk the great toe always reassumed its vicious position under that next it and the ulceration commenced as before. Finally, after a long treatment the patient's father and a friend came to me and urged me to take stronger measures, and if necessary remove the toe, as the youth had been thrown out of work and was unable to take any exercise for a long time. I was of course averse to amputation of the member, though it was only an encumbrance, and began to review for the students present all the measures which have from time to time been resorted to for improving the deformity. In doing so I was dwelling on the question of excision of the metatarsal phalangeal joint recommended by some, when one of our students, Mr. C. Hoar, asked me if the condition was ever relieved by osteotomy of the metatarsal bone and straightening of the toe thus without interfering with the joint at all, as he had often seen me operate for genu valgum. I told him that I did not think it had been done hitherto, but that the idea seemed such a good one that we should put it in practice in this case at once. The patient and his father accepting the proposal to do so with great readiness, I performed the following simple operation with the strictest Listerian antiseptic precautions. Having first made an incision through the soft parts about an inch long, on the inner aspect of the metatarsal bone, above its head, I cut out with a chisel a small wedge-shaped piece of bone from the shaft just above the head, the base of the wedge being on the inner surface of the bone, and the apex at a point nearly through to the other side. Then, by forcibly adducting the great toe, I snapped the uncut remainder of the metatarsal bone, and brought the whole member into a straight line. In this position it was easily retained by a narrow splint along the inner border of the foot. The wound was dressed antiseptically, and the patient was allowed to go home at once. But little remains to be said about the case. The wound was left undisturbed for ten days, and was then found practically healed and without suppuration. The splint was, however, left on for a few days longer, after which, as the bone had united in its now straight position, the patient was allowed to return to work, which he was soon engaged in as actively as ever. I have seen him several times since at intervals (yesterday, Feb. 18th, 1884, for the last time—i.e., over two years after operation), and the toe is almost quite straight, although a little bent by a bad-fitting boot since worn. He is quite relieved of all the troubles incidental to this deformity.

It will be observed from the above short description that this simple operation is almost the same as that we are in the habit of performing for genu valgum. Here, however, I thought it better to remove a small wedge of bone instead of simply dividing the part transversely, as in the case of the knee. I imagined there might otherwise be some difficulty in bringing the parts into position, remembering the short leverage of the toe as compared with that of the tibia. The course of the healing process was as completely satisfactory as these osteotomies usually are under the antiseptic treatment of wounds. It was without suppuration, pain or fever. The toe has been a little stiff since, as might be expected, but the patient does not wish any forcible flexion of it, as the stiffness gives him no inconvenience.

I have purposely avoided going into minute details of this operation. Its principles and practice must be perfectly clear to anyone familiar with osteotomy for genu valgum now so commonly practised. It is quite simple and free from risk if performed with strict antiseptic precautions, and though not often called for, still I cannot help thinking that there is a useful place for it in surgery.

This little operation may have been done before, but I cannot find any record of such a procedure. If it be original in this case, the merit of the suggestion lies with one of our students at University College Hospital.

Harley-street, Cavendish-square, W.

[26] British Medical Journal, Oct. 21st, 1882.

SOME COMMENTS ON LETHARGIC STUPOR OR TRANCE

AS ILLUSTRATED IN THE CASE RECENTLY REPORTED.

BY A. M. BROWN, M.D. ST. AND., &c.

THE proposal to increase the means of studying diseases of the mind and nervous system in a less exclusive sense than at present exists is certainly a wise one. What stronger argument could be advanced than the late case of lethargic stupor or trance so fully reported by Dr. Gairdner of the Glasgow University in THE LANCET of Jan. 5th and 12th and Feb. 22nd? The reticence of medical circles regarding this instance is instructively surprising. What can be the reason? Can there, after all, be something considered "no canny" about such conditions? Or is it that in England we

are still unacquainted with the nature of such ailments? Science does not admit of the first, and assuredly the means at our command do not justify the second. The literature of the subject is abundant, and if the home field of study does not suffice it can easily be supplemented elsewhere. A few months' association with the libraries and clinical courses of Salpétrière would go far to supply any want the profession may feel. Perhaps for the moment we are too much engaged in mimicking Continental germ pathologists and physiological experimentalists to find time for noting the minor maladies of the brain and nervous system; the scientific medicine of the day apparently requires the study of phenomena more tangible and material. If a case of lethargic stupor or trance could afford scope for microscopy or micro-germ research, no doubt the interest would be greater. A malady without a microzyme may be a little commonplace, and ill requite the culture craft in vogue; but though it supplies no space for antiseptic measures, disorders of this class are nevertheless realities, and merit the attention of the medically scientific. The case of Mrs. McI——, so fully reported by Dr. Gairdner, is clear enough, and leaves little room for doubt or difficulty. The poor woman, recently confined, low and anæmic in condition, with accompanying mental depression, becomes moody, loses her appetite, and finally refuses food altogether. The trance state sets in suddenly, not fully defined, however, as for several weeks there are certain actions in compliance with the calls of nature, unquestionably, if unconsciously performed, and naturally these are the last to disappear. This presents us with a phase of instinct not always free from danger, and which operates the more powerfully the lower we descend in the social scale; long-continued culture is required to uproot it, even in those of cruder natures, and where we should least expect to find it. But even this passes as the instinctive and reflex sensibility decreases, and finally she falls into a state of almost absolute unconsciousness and all but perfect anæsthesia, which continues for more than three months, and which is for the first time broken by a visit from her husband, from whom she had all that time been separated by her removal to hospital. Though still unconscious, it is then the patient becomes sensible of a presence, of a touch, of the accents of her native tongue; her eyes become suffused with tears, and the first articulate attempts are Gaelic words of prayer. From this moment she shows signs of returning sensibility, and when her husband repeats the visit on the following day she sits up in bed, and with some affectional emotion she asks about her children and her home, as if she had been absent only a few days.

Such is the simple history of this particular case; and in it, so far as I can see, there is nothing but what has occurred before in the history of human ailments, and will occur again from time to time, as all who are acquainted with the subject of this state must feel perfectly satisfied.

For those acquainted with the subject of vitality under the abnormal aspects which this case presented, a sufficiently clear conception of its nature may be easily gleaned. The simple outline, without commentary, of the conditions personal and associated of the patient, leave little to desire. There is the ordinary example of the wife and mother of the little imaginative humble Western Highland classes, recently confined, low in health and nervous tone, but showing total absence of the physical and moral phenomena which go to constitute the mystically favoured of religiously fervid Catholic circles, or the hystero-cataleptic and hystero-epileptic of a Salpétrière clinique. For those familiar with the various types of either class and the multitudinous literature relating to them, Dr. Gairdner's report should enable them with ease to differentiate the relative position of this particular case in the category of nervous functional derangements to which it evidently belongs. Those cases referred to by Dr. Gairdner as coming more or less under the designation of lethargic stupor or trance, and which he speaks of as either having seen himself, or finds reported by others, are of a very mixed character, and present even in the Carlisle case, in which he finds identity, no very clear resemblance to the one in question. There are very marked pathological conditions distinguishing the former as different even in kind. The tendency to intermittent muttering and low delirium, as in typhus fever, and the unconsciousness being by no means either so deep or so persistent, and the return of sensibility and desire for food but gradual, show the affinity, both clinically and pathologically, to be remote. Naturally we must not expect to find such a portrait as that which Dr. Gairdner's case supplies in the pathological clinique of the Salpétrière; its exhibits are of quite another order, if some times showing some resemblance. Their widely different and more strongly pronounced pathological conditions explain the reason of their being there, as also the necessity of arbitrary modes of feeding common to all establishments for the cure of the insane. In this clinical school of mental and nervous maladies a familiarity with the nervous types is an easy matter. It is when we come in contact with the various forms of "anæstheso-neurasthenia" (if I may be allowed the term), with their exceptionally intensified, disordered sentient phenomena, periodic or continued, that the great difficulty begins. It is here that we fail to detect or grasp the conditional pathological processes presumably related to the anomalous manifestations of organic and animal life, in which the whole systemic functional orders, assimilative, nutritive, sensory, and mental, exhibit departures from those normal types which in our present state of physiological knowledge leave us ignorant of everything save their visible phenomena, while awaiting the weight of accumulating facts of observation to throw further light upon the subject. Ecstasy, catalepsy, and trance, in their various forms and intensities, from simple lethargic stupor to long-continued and complete insensibility, conditions apparently consistent with organic integrity, must be provisionally regarded as pathological expressions whose mystery is evidently confined to neural dynamical perversion, central and peripheral, and sometimes so purely so that it may easily be induced voluntarily from within or arbitrarily from without. For demonstrations of these ecstatic and hypnotic states, it is not necessary either to visit the contemplatives of Mount Athos or to witness the mesmeric entertainments of the London Hall of Science.

Ecstasy, catalepsy, and trance, in their various modifications and intensities, constitute a pathological group possessing markedly a typical significance which would render them easily distinguishable if they more frequently presented themselves. Seldom met with in our Protestant and less emotional communities, they are liable to be interpreted through the medium of that ill-digested and heterogeneous literature which, in a condensed form, makes up the Medical Dictionary articles on the subject, productions of invariable traditional colouring, in which the rarest and most marvellous instances occupy the prominent positions. When an isolated case of this category occurs, such as the one in question, a clear and impartial scientific estimate of it is not easily obtainable. The diagnosis, analysis, and treatment are always indirectly influenced by public curiosity or deference to conventional notions of a sentimental or supernatural kind, more troublesome than convenient, even when worthy of respect. The scientific positively disposed are apt to yield too much to prevailing prejudices in dealing with the facts of exceptional nervous morbid forms which come before them. Quite recently the Warlomont *fiasco* in the Belgium Academy of Medicine, referred to in the report, supplied an example in illustration of this fact. M. Warlomont, the learned perpetual secretary, in summing up the value of the various ecstatic, cataleptic, and trance conditions of the girl Louisa Lateau, and speaking of her perpetual fastings, visions, and representations of the Messianic passion with its agony details wrought out in the mystic hæmorrhagic stigmatisms, thought to avoid offending the metaphysical St. Peters on the one hand, and the positive St. Thomases on the other, in complacently withholding a definite opinion as to their nature, prudently preferring to leave the marvellous morbid eccentricities to the inscrutable operation of *le diable ou le bon Dieu*. But this time-serving eclecticism proved a fall for the honourable academician, from which he is not likely to recover, in the eyes of many. The *fideles* might console themselves with St. Augustine, "Credo quid absurdum!"—as for the scientific there was nothing felt but shame for the position, and they could only mutter, as MM. Boens and Charbonnier-Debatty did audibly, "Autrefois l'on bâtissait le surnaturel sur l'ignorance, aujourd'hui on l'édifie sur le mensonge." Doubtless such influences as I have referred to are difficult to avoid entirely, but they show how necessary it is for those engaged in the study of natural science to remember that, for the truly scientific mind, questions of materialism or immaterialism find no place; it deals simply with phenomena and the necessary conditions of their manifestations, the rest is left to metaphysics and the world of idealities.

The case of Mrs. McI——, as reported, presents us with

an instance unique in its simplicity. It is scarcely possible to conceive of one with more absence of actual disease or mental complication. Though coming on suddenly, it is so gradual in its intensity development, that there remains for weeks the apparent spontaneity in connexion with what has been called the reflex function of the brain, so much so as to "enable the patient to obey the important calls of nature in a quasi-automatic manner, and to be moved to do so while alone rather than in the presence of others"—a mode of action which in a conscious state is very natural. Moral habits often become instinctively imperative, and the fact of this one persisting under such circumstances can only be "perplexing" when we persist in making functional determinism square with preconceived notions based on a normal state of the organism. Dr. Graham is probably not far wrong when he states in his report that "it was his conviction that if she had been as closely watched at home as she was in the infirmary, she would have passed her evacuations in bed, rather than have allowed herself to be seen moving a limb." In a strictly scientific spirit, we must regret such a choice was not permitted her. It says much for the poor patient's innate sense of propriety under social conditions where it is generally supposed the least likely to be taught.

In the presence of such facts and phenomena as these, though we may have no explanation to offer, it is surely our duty as unobtrusively as possible to patiently observe and not disturb or trifle with them until we know decidedly their meaning and significance. The same applies to nourishing under similar circumstances. In this particular instance the stupor had not reached its full intensity till some time after the forced feeding was begun, and that state continued for months in spite of it. Much is made of this phase of the treatment and the mode in which it was carried out. The speculations with regard to the advantages scientifically gained are liable to objection, and may legitimately be questioned. If it may be reasonably assumed that feeding saved the life of the patient under the conditions, it may as reasonably be assumed that not only was this not the case, but that the condition (trance) was probably prolonged. The probabilities are (judging from analogy with other similar instances), if this case had not been so treated, its duration might have been much shorter, leaving little but debility to remedy, and I have no hesitation in thinking so. It was not artificial measures which aroused the patient into consciousness—the influence of the husband's presence is there in evidence (very probably the "peat reek" smell played no mean part in consummating the event)—and had she not been fed at all, and had remained much longer in the state of insensibility, the case would not have been so very remarkable when compared with many others of its class. It may not be quite explicable why, under certain circumstances, or under any circumstances whatever, a human being can vegetate for months or for years without solid food, but many have done so, and others will do so again; and what is more, under conditions in which feeding would be absolutely fatal. The necessary amount of systemic organic force consistent with that variable state called vitality, even with conscious life, seems over-estimated. So familiar are we with the normal types of nervous derangements, that we refuse to see varieties beyond very narrow limits, and claim to ourselves a capacity for analysing their phenomena far beyond our powers of even noting or detecting them. Feeding trance is very much like feeding fevers, a method very liable to abuse, and which no amount of experience or intelligence can enable us to adjust in a positive sense. The organism when profoundly absorbed in those conditions relaxes its allegiance to surrounding media and seems independent of the outer world. Too busily engaged in utilising the structural stores of nutritive material at command to inquire or tolerate with impunity, except within given limits that we would impose on its perverted forces, it reminds us of organic laws, and the duty of endeavouring to read aright their just significance before venturing to combat them, no matter on what principles or with what intention; a duty all the more incumbent as such states so rarely come before us. In this singular corner of the physiological domain an order of things prevails altogether novel, and seemingly inverted, and which sets at defiance formal economic theories supposed as universal. Principles of supply and demand, consumption and production, as applicable to the human body even in disease, as to the body politic, may here sometimes seem to be excluded. In clear accounts we know the expenses and receipts must balance, but the operations in such cases are too abstruse for our manipulation. Still, the organic laws of nature which regulate the proportional relations between digestion, assimilation, and excretion must obtain, though outwitting our detection, and their apparently absolute abeyance need not necessarily entail danger, either to life or hopelessness of ultimate recovery. In this respect man does not differ in kind but only in degree from other organised creatures lower in the scale of being. The marvellous vitality capacity which he in common shares with them, even in the normal health conditions, when limited to air and water only as a source of nourishment (facts familiar to us all), ought to supply some solid grounds for working out the physiological problems which fasting in the state of trance involves.

To this form of systemic adaptability, so mysteriously magnified by more or less gradual preparation through obscure and elementary morbid processes, it is surely presumption to assign any definite limits. Dr. Gairdner has clearly expressed this view, when, in speaking of the category to which the case which he reports belongs, he remarks that "one is struck by the almost uncontrollable disposition to regard such cases as altogether outside the boundaries of true physiological science;" and, in continuation, observes, "it is certainly under the head of the disorders" mentioned—ecstasy, catalepsy, trance, and the like, "not to those epileptic forms in their well-recognised clinical types, that the supernatural origin of the phenomena, whether entertained or not, must fall to be argued." Here we have those pathological distinctions with their respective claims which we have been insisting on throughout clearly admitted, and one cannot help expressing surprise that in Mrs. McI——'s case there was done, or allowed to be done, so much more than, judging from the nature of her condition, was apparently necessary. As for psychological phenomena, which in any case are but a part and not the whole, fortunately they do not complicate the subject. There must be something to which the trance state only appears as incidental to admit of such an association. When this occurs, however, it cannot fail to be misread by some, and the reporter has done well in reminding his readers that the time has obviously not yet gone by for the possibility of the discussion of their "morbid supernatural origin." Notwithstanding all the culture and scientific instincts of the age (as Dr. Gairdner finally puts it) or of the age to come, there is little likelihood of its being otherwise so long as humanity in the mass remains constituted as it is. Scientifically, however, miraculous etiology is inadmissible, and as for the inauguration of "the reign of law," its reign being already demonstratively acknowledged as universal and eternal, man may henceforth save himself the trouble of attempting it. To escape the embarrassment and inconvenience of these facts, those in quest of positive truth will do well to accept them as their principle and guide. In the teaching of the natural sciences, "law in nature" forms the only text we have to deal with, and our duty is to study and to learn it in all its range and operations in so far as our finite faculties enable us.

In concluding these comments, I may be permitted to add that if death from inanition during the state of trance, simple and unassociated with insanity or paralysis or any appreciable organic disease, is a possibility which has yet to be observed and recorded, the same applies to being buried alive. Under conditions of marked indications of vitality, such as bodily warmth and respiration—in fine, all save consciousness and sensibility—such an accident would seem impossible, as was remarked on reference to the case under consideration.

Keppel-street, W.C.

THE TREATMENT OF UTERINE DISPLACEMENTS BY MEANS OF MEDICATED TAMPONS.[1]

BY ROBERT BELL, M.D.,
PHYSICIAN TO THE GLASGOW INSTITUTION FOR DISEASES OF WOMEN.

ALTHOUGH versions and flexions of the womb may in a few exceptional cases exist without producing very urgent symptoms, and though these displacements do not endanger life, they as a rule cause so much discomfort and give rise to such a variety of reflex symptoms and painful sequelæ,

[1] Read before the Edinburgh Obstetrical Society, Feb. 13th.

that we cannot but look upon them, in consequence of their frequent occurrence, as prolific factors in the production of intense suffering in women. If, therefore, any mode of treatment has been found of service in reducing, in however small a degree, the train of painful concomitants of these affections, it is a duty one owes to his fellows to make his results known and endeavour to obtain an independent trial of his method by unbiased observers.

When, however, I speak of the treatment of these displacements by means of medicated tampons, it is not to be supposed for a moment that I do not value, and that most highly, the various mechanical supports that have been devised by so many ingenious and eminent members of the profession, and which appliances have proved of such immense service in the treatment of the affections under discussion. There are, however, certain conditions of the uterus where the introduction of a pessary would produce much more pain and a more serious array of symptoms than the malposition, if left alone, would tend to do, and it is in such circumstances that the tampon in my experience has proved of such eminent service. Since I had the honour of addressing this Society on the same subject about two years ago, I must admit I have had reason to modify my views very considerably; at the same time it must be confessed I have now, after a very extensive experience of this method of treatment, even greater confidence in its efficacy in properly selected cases than I had then. When we remember that flexions, and retroflexions in particular, have proved in the most experienced of hands so intractable, when we hear such an eminent authority as Schrœder give as his opinion when speaking of flexions that "of all these troubles, retroflexions are the most disagreeable, for, once actually present, they almost never disappear spontaneously, and obstinately defy treatment"—does it not behove us to look for some effectual plan? But this is not Schrœder's view alone. His conclusions are homologated by many others, whose opinions are of equal value with his. If, then, it can be demonstrated that another mode of treatment, though it has the disadvantage of entailing a very considerably greater amount of trouble than the application of a pessary necessitates, has been the means of effecting a cure when the pessary has failed to give relief, it surely is not unreasonable to ask that this method should have a more extended trial and its merits or demerits be freely discussed. Before entering on a description of this plan of treatment, it will perhaps be advisable to travel over somewhat familiar ground, and glance at some of the symptons induced by the various displacements of the organ. This, however, will not, I trust, be time wasted, as so many of the pathological conditions induced by the flexion are not so thoroughly relieved when the cause is removed by the application of a pessary as when the uterus is supported by the tampon. This will be obvious when we recognise the fact that the tampon acts also as a depleting agent. We are all familiar with the great power glycerine exerts in abstracting fluid from an œdematous tissue, but it may not be equally well known that this power is very much enhanced when the glycerine contains alum in solution. Moreover the presence of alum, by virtue of its astringent properties, gives tone to the vaginal walls, the uterine walls, and supports. The tampon, therefore, when saturated with a solution of this salt in glycerine, and properly applied in flexions or versions, acts in three different and equally beneficial ways: (1) as a support; (2) as a depleting agent; and (3) as an invigorating agent to the uterus and vagina. If we take a typical case of retroflexion, and observe the objective symptoms only, what do we find on making a digital examination per vaginam? If the displacement has existed for some little time, the uterus as a whole will be found enlarged and flabby. This of course may be partly ascribed, in one who has borne children, to subinvolution of the organ; but that it is not always due entirely to this fact is evidenced by this hypertrophy occurring in nulliparæ who are subjects of retroflexion. The os and uterine canal will be gaping and patent throughout, and from it will ooze a continuous stream of acrid muco-purulent discharge, often so irritating in its nature as to induce vaginitis. The vaginal portion of the cervix is excoriated; its mucous membrane bulges out, producing ectropion. The uterus, but more especially the retroposed fundus, is acutely sensitive to touch, and there is frequently hyperæsthesia of one or both ovaries. Now it is quite evident that all these symptoms are not due to the mere fact of the organ being retroflexed, but to the effects of the altered relations of the fundus and body to the cervix, and the consequent traction upon the uterine ligaments, and thus upon the bloodvessels, but more especially upon the veins. The hypertrophied organ, if complete rest is not enjoined, may by degrees become more and more prolapsed, till at length the flexion will be cured at the expense of a procidentia. We will not, however, follow the progress of the malposition so far as this, but study it only as a retroflexion. By degrees, of course, the circulation will accommodate itself to the altered circumstances, and the acute stage gradually give place to the chronic, when sensitiveness to touch will in like ratio diminish. Yet the general symptoms of distress do not disappear as a coincidence, nor have the difficulties of treatment been removed. I have seen in a considerable number of instances where a retroflexion has been suddenly produced by a fall, very frequently on the ice, most obstinate metrorrhagia induced. In these cases, however, it was noteworthy to observe that the train of acute symptoms did not present themselves, as congestion was naturally absent. Yet what to my mind is an important factor of inflammation of the uterus was present in every case of retroflexion—viz., the checking of the venous return-flow by compression of the walls of the vessels at the point of flexion. By virtue of the tubular and elastic construction of the arteries the circulation in these is not much interfered with at first, and so the blood is constantly being pumped into the uterine tissues in larger quantities than it can be carried away by the veins in consequence of their flaccid walls being unable to resist the compression exerted upon them at the point of flexion. These frequently give way, and then we have metrorrhagia, or if they do not rupture, congestion supervenes. That this is due to the interference with the venous circulation is proved by the fact that if the uterus is immediately replaced and retained in its normal position the hæmorrhage will speedily cease, and the natural order of things be soon re-established. This compression, when hæmorrhage is not induced, further reflects an influence on the ovaries in consequence of the ovarian veins having to do duty for the uterine vessels. These are constantly surcharged, and congestion of the ovaries may result. In this way we can account for neurosthenia of the ovaries in subjects of metritis and endometritis, which neurosthenia entirely disappears when the inflammatory condition of the uterine tissue is removed by proper treatment, thereby demonstrating that the congestion of the one is entirely dependent on that of the other, and that the oöphoritis is, as it were, a prolongation of the metritis through the medium of the ovarian veins. When we consider these veins are devoid of valves, this is rendered still more palpable. If this is the correct explanation of the congested state of the organ and its lining membrane in retroflexion, it also explains the *modus operandi* in the production of the general hypertrophy which rapidly becomes a part of the disease, and aids largely in making the retroflexion more and more acute. True the copious secretion of muco-purulent matter in some degree relieves the overloaded tissues, but it does not cure the pathological condition; on the contrary, it becomes a serious symptom of the disorder. On the other hand, the menorrhagia, which usually takes the place of the normal menstrual flow, gives temporary relief to the local symptoms, but at the expense of the general health, and thus in the long run seriously reacts, by reducing the vitality of the patient, upon the already enfeebled womb. It will be obvious, then, if we can, while taking advantage of the depleting power which glycerine is known to possess, at the same time augment its power in that respect by the addition of an agent which will simultaneously by its styptic powers reduce the arterial supply, and by its astringent properties induce contraction of the uterine muscular fibres, and thus materially assist in the expulsion of the venous blood, I say it will be obvious that we will, to a very considerable extent, counteract the evil effects of the malposition. Now, alum is endowed with these powers in a most marked degree. It has the further advantage that it does not stain the underclothing of the patient like some other astringents. It is still further to be recommended because of its effect on the catarrhal discharge, which it coagulates, and consequently prevents its decomposition. By this effect it destroys the irritating properties of the discharge. Under its employment, by means of the tampon, as a result of this property I believe, papillary ulcerations rapidly disappear, and hypertrophy of the cervix rapidly subsides. In simple endocervicitis, which, I am of opinion, in a great number of instances, if not actually induced, is at least rendered chronic by decomposition of the

BEST COPY

natural secretions, it proves of immense benefit. If to the therapeutic properties which the medicated tampon possesses we add its ability to act as a support when properly applied to the dislocated fundus, and, moreover, that it can be gradually made to exert an increasingly greater amount of power as the hyperæsthesia of the uterus becomes reduced, it must be acknowledged that it can be employed as a pessary when the ordinary vaginal pessary would be a most dangerous instrument to insert. The tampon forms a bed for the dependent fundus to rest upon, and it is easily moulded to suit the exigencies of the case. Each successive tampon by degrees elevates the fundus until it is made to occupy its normal position, while simultaneously the hypertrophy and congestion are being removed by the therapeutic properties of the medicaments with which the tampon is saturated. When the normal position of the uterus has been re-established, it is retained there either by a continuation of the treatment for a little time, or, if it is thought more advisable, by the application of a well-fitting vaginal pessary. It not unfrequently has happened in my experience, however, that the tampon has accomplished all that could be desired, a complete recovery having been the result, and this often when a pessary has been worn for years without affording relief. In like manner when prolapsus is present, especially when due, as it frequently is, to a greater strain being thrown upon the uterine ligaments and vaginal wall by the constant dragging of a subinvoluted organ, we observe the immense benefit derived from this tampon. It matters not, however, whether the hypertrophy, as in subinvolution, is the primary cause, or whether it is secondary to the prolapsus, which we know often is the case. I say it matters not how the prolapsus has been produced or in what manner the hypertrophy has arisen, we obtain the dual effect of the tampon and relief of the symptoms. Its application is rapidly followed by a reduction in the size of the organ, a cessation of the uterine catarrh, and a healing of any excoriation that may exist. At the same time the uterus rises in the pelvis and speedily assumes its normal position.

(To be concluded.)

A CASE OF REFLEX PARALYSIS.

By A. W. MAYO ROBSON, F.R.C.S.,
ASSISTANT SURGEON TO THE LEEDS GENERAL INFIRMARY AND LECTURER ON PATHOLOGY AT THE LEEDS SCHOOL OF MEDICINE.

A. M——, aged fifteen, was quite well in every way up to July, 1882, when she fell with a pitcher in her hand and cut her right forearm on its inner and anterior aspect near the middle. The cut, which bled very freely, was about two inches long; it healed slowly but apparently well. After a few weeks she noticed a little weakness of the right hand, which gradually increased up to my seeing her as an out-patient at the Leeds General Infirmary in April, 1883, when I noticed a very marked wasting of the ball of the thumb and little finger, especially the fifth. The hand was numb, cold, and livid, presenting a contrast to the opposite one, which had a healthy appearance. Faradaism elicited no response, but a twenty-cell continuous current produced feeble contraction of all the muscles except those of the ball of the thumb. The right forearm was rather thinner than the left. There was no loss of sensation when the hand was warm. The scar of a wound which had healed by granulation was perceptible in the forearm over the course of the internal cutaneous nerve. Galvanism was ordered to be applied to the affected muscles. In July the shoulder and upper arm seemed weak, and a wasting of the deltoid was found to have taken place; the posterior scapular muscles also seemed to be impaired in power, and there was a tendency to projection of the scapula, evidently due to weakness of the serratus magnus. Galvanism was ordered to be applied to all the affected parts. In a note made last week I find recorded more power in the upper arm and shoulder, deltoid fuller, scapula less prominent, and muscles of hand apparently increased in volume; hand still cold; reaction to faradaism and galvanism (twelve cells) fairly good in all the muscles except those of the ball of the thumb, where even the strongest current produces no reaction.

I take this to be one of those interesting examples of reflex paralysis of which a number of cases are now on record. According to Dr. Brown-Séquard it may be brought about in two different ways: in one kind an inflammation takes place in the nervous centres by an influence exerted by the peripheric irritation, and the paralysis thus produced is accompanied by the usual symptoms of congestion or inflammation of some part of the brain or spinal cord; while in another kind the paralysis exists without any such symptoms of inflammation, here being due, at least in some cases, to a reflex contraction of bloodvessels in a part of the nervous centres. In some cases paralysis may apparently depend on a peculiar influence exerted on nerve-cells in the central nervous system by an irritation starting from peripheric nerve fibres, producing what has been called inhibition, or at any rate changing the condition of activity of these nerve-cells. This last mode of production of paralysis is the most frequent in the case of peripheric wounds acting on a nervous centre so as to produce loss of voluntary movement. This inhibition may co-exist with spasm of vessels as a cause of paralysis. The author above referred to mentions a case of injury to the elbow producing paralysis of both arms, but especially marked on the injured side. Every change in the degree of pain in the elbow was accompanied by a corresponding change in the degree of paralysis. Dr. S. Weir Mitchell gives a case of paralysis of the arm due to injury to the sciatic nerve. It is well known that facial palsy has followed neuralgia of the fifth nerve, and in one case was cured by removing a piece of porcelain which was irritating the infra-orbital nerve. Schenkins has seen a case of general paralysis produced by a wound of the eyebrow. In the example before us I suppose the irritation has been conveyed from the wound along the internal cutaneous nerve to the cervical region of the spinal cord, where, either by continuity of tissue, transference of impressions, or reflex action, the motor cells situated in the anterior cornu of the cord have become impaired in function, and have thus given rise to the paralysis.

Leeds.

CASE OF RECOVERY AFTER SWALLOWING CARBOLIC ACID.

By ALBERT HIND, L.R.C.S. ED., &c.

ON July 30th, between 12 and 1 P.M., Miss F——, aged seventeen, took a six-ounce bottle of crude carbolic acid (the strength of which I afterwards found was 14 per cent., and from which two teaspoonfuls had previously been removed), and, putting it to the back of her mouth, swallowed all but twenty or thirty drops. Her mother says that she had been constipated for nearly a week, that she was in the habit of taking medicine in that way to avoid tasting it, and that she had mistaken it for black draught. She had had two slices of bread-and-butter and a teacupful and a half of tea for breakfast at 8 A.M., and nothing else since the previous night. Her mother at once discovered the mistake, and, putting her finger down her daughter's throat, caused one or two teaspoonfuls to be vomited, and then gave her some mustard and salt, and also lime scraped from the wall.

In the temporary absence of my neighbours, Messrs. Furze and Sanders, I now saw the case ten or fifteen minutes after the occurrence, and persuaded the patient to swallow the whites of about fifteen eggs mixed with more than a gallon of well-warmed, sweetened milk. The first milk that was returned seemed perfectly free from carbolic acid; the second was quite sooty, and I fancied perhaps it might contain two ounces; and each subsequent vomit contained carbolic acid until the last, which looked and smelt perfectly free from it. Mr. Furze having arrived and seen her at 3 P.M., we both left her, directing some soap and opium pill to be given every two hours or so according to any pain, also a small quantity of thin arrowroot, and warm fomentations or poultices to the abdomen, which was much swollen; in fact the mother pointed out to me how much the abdomen was swelling and getting hard as soon as I arrived. In the evening the pulse was 76, and the temperature under the tongue 98°. Tongue and mouth clean and natural; one white patch between right tonsil and uvula; a little uneasiness in swallowing; abdomen slightly tender; looks and talks comfortably.

July 31st, 3 P.M.: Uneasy from bowels not acting; pupils slightly affected by opium; jerks a little. Had vomited slightly after taking an egg, and the vomit smelt of carbolic

BEST COPY AVAILABLE

acid.—Evening: Pulse 76; temperature 98°. Another white patch anterior to the other; tongue rather white; abdomen decidedly tender. No tenderness on pressing in lumbar regions; passed about a pint of urine of a deep porter colour (brown with a greenish tinge) and smelling strongly of carbolic acid.

August 1st, morning: Her mother administered an enema of soap-and-water almost without result.—Evening: Tongue very white; another white patch on hard palate; fauces red and swollen; less easy to swallow. Diet ordered to consist of milk and lime-water only. Patient slept well for four hours last night; jerks a little at times; the abdomen is more tender. There is considerable pain when pressed in lumbar region. A pint of urine has been passed, still dark and smelling of carbolic acid.—2nd, 9 A.M.: Dr. Sanders considered her worse.—1 P.M.: Skin cool; tongue whiter; fauces more swollen; abdomen and loins more tender; no urine passed. It being clear the last enema had quite failed, I administered more than three quarts of soap-and-water, which caused a little vomiting (an ounce) and afterwards a copious clayey motion.—3rd: No sleep last night from irritability of skin, which is now as red as a lobster; urine but little darker than natural; whiteness of tongue and tenderness diminishing. Temperature 96°. Hungry.—4th, noon: Redness gone; little tenderness; no urine; tongue white; crying for food. Allowed four ounces of bread cut into a saucepanful of boiling milk, but it caused pain.—5th: Several pints of healthy urine; no motion. To repeat the bread, also to have cocoa, sago, and jelly.—6th: Tongue white, tenderness almost gone. To have half an ounce of castor oil.—7th: Pain after oil, none since; to leave her bed. Has continued well up to the present date. I subsequently found the vomited matter exceeded two gallons.

The above is the case referred to by Messrs. Calvert and Co. It would lead me to consider that when the acid is in combination with tar oils absorption and assimilation take place, but may be retarded. A case reported in THE LANCET of August 18th, 1883, bears out this view; also that in these and other cases of poisoning, where the antidote is so little objectionable, it is desirable by repeatedly distending the stomach with it to endeavour to relieve it of all traces of offending matter.

South Molton.

A Mirror OF HOSPITAL PRACTICE, BRITISH AND FOREIGN.

Nulla autem est alia pro certo noscendi via, nisi quam plurimas et morborum et dissectionum historias, tum aliorum tum proprias collectas habere, et inter se comparare.—MORGAGNI *De Sed. et Caus. Morb.*, lib. iv. Proœmium

PADDINGTON-GREEN CHILDREN'S HOSPITAL.

TUBERCULAR MENINGITIS IN AN INFANT; DEATH; NECROPSY; REMARKS.

(Under the care of Dr. Y. DAWSON.)

FOR the following notes of this case we are indebted to Dr. F. T. Hebb, house-surgeon.

J. G——, aged one year and three-quarters, was admitted on February 6th, 1884. He appeared half unconscious. The mother had died soon after the child was born. The father says her death was caused by a "bleeding cancer and consumption." The child fell ill about four days before he became an in-patient; he refused his milk, he was sick once or twice, and was once slightly convulsed. When admitted the symptoms present were a pretty constant spasm of the corrugator supercilii. He sometimes ground his teeth and was apathetic, apparently regardless of surrounding objects; a bright light, however, seemed to cause distress. The pupils were dilated and somewhat sluggish, the bowels were open, but the motions were offensive; he took milk fairly well. Temperature 97°.—Feb. 8th: The child has become more restless, he moves his head from side to side; he often grinds his teeth; sometimes the hydrocephalic cry is heard; respiration is somewhat hurried, but the rhythm is regular; the mucous membrane of the lips is dry and flabby; tongue rather furred; anterior fontanelle full. A slight dry cough recurs pretty often, but the lungs are clear. He remains for the most part in a sort of stupor; takes his milk well. Temperature 98°.—9th: The pulse has now become peculiar in character; for several beats it is full and fairly slow, and then follow several hurried pulsations, somewhat irregular and feeble. Respirations are regular in rhythm, but the depth of inspiration varies; several successive inspirations are deep, then follow several much more shallow. He squints occasionally, but there is no inequality of the pupils. The upper eyelids are periodically raised, and after a short interval slowly lowered. The abdomen is somewhat retracted, and the taches cérébrales are very apparent; the hands are often raised to the head. Temperature 100·2°; bowels confined.—12th: The pupils rhythmically dilate and contract; the abdomen is much more retracted; the child is more apathetic; he refuses his milk; the other symptoms remain as before.—13th: He is slightly convulsed, especially on the right side; superficial veins of head much distended. Temperature 96·8°; child somewhat comatose; conjunctiva injected; abdomen excessively retracted. Later on in the day the convulsions became pretty frequent, and assumed a more general character, but still they were more marked on the right side; he lies with his eyes half closed, nearly unconscious; it requires a fairly strong stimulus to awaken sensibility; the corrugator and occipito-frontalis have ceased to contract.—14th: Convulsions have ceased; symptoms of hypostatic congestion of the lungs; respiration very quick. Temperature 100·4°; he refuses his milk; the other symptoms remain as before.—18th: The child died to-day very quietly. Two days ago the convulsions began again, but they soon ceased; there was inequality of the pupils. The other symptoms remained more or less unchanged.

Necropsy, twenty hours after death.—Only the brain was examined. There was a large amount of cerebro-spinal fluid at the base of the brain. The small arteries at the base appeared somewhat more congested than usual, but no tubercles could be seen with the naked eye.

Remarks by Dr. DAWSON.—The microscopic preparations of the pia mater made by Dr. R. Grainger Hebb, the pathologist to Westminster Hospital, showed the tubercle in the early stage before caseation had taken place, and exhibited the bacillus tuberculosus in considerable numbers on a patch of pia mater adherent to an arteriole at the base of the brain. The bacilli were very well seen, and their appearance was further corroborated by my colleague, Dr. Leslie Ogilvie. The interest in this case lies in the discovery of the bacillus tuberculosus in the membranes of the brain in a case of tubercular meningitis at so early a stage; for although their existence in the meninges in general tuberculosus was demonstrated by Cornil lately in Paris, their presence in the brain prior to caseous degeneration has not, so far as I am aware, been hitherto noticed in this country.

NEWCASTLE-ON-TYNE INFIRMARY.

UNUNITED FRACTURES OF BOTH PATELLÆ; FRAGMENTS OF LEFT PATELLA WIRED; RECOVERY.

(Under the care of Mr. PAGE.)

R. H——, aged fifty-four, a stableman, was admitted on November 4th, 1883, suffering from ununited fracture of both patellæ. The right patella was broken fifteen years ago by falling upon his knee, since when his knee-cap has rested (about two and a half inches above the condyles) on the anterior surface of the femur, where it is quite fixed. Neither the ligamentum patellæ nor any portion of the patella can be felt below the knee-joint. The patient can both flex and extend his knee, the latter movement being evidently produced by the expansion of the lateral portion of the quadriceps extensor tendon. Seventeen weeks before his admission the patient was kicked by a pony on both knees, when he sustained a fracture of the left patella and a fracture of the right tibia immediately below the knee-joint. On his admission into hospital there was no union of the left patella; both fragments were wide apart. The patient was quite unable to stand; whenever he attempted to do so his knees bent under him. It may be stated that before the second accident the patient was able to follow his occupation as a stableman.—17th: Mr. Page made a longitudinal incision over the front of the knee-joint, so as to expose the patella. The lower fragment was also fractured longitudinally. The fractured surfaces were freshened and drawn together with strong silver wire. The wire was hammered down on the face of the

patella. The wound was closed with catgut sutures. Three drainage-tubes were inserted, one on either side and one between the patella and skin. Lister's dressings were used.—18th: The patient has had a good night, with the exception of some pain, which was relieved by a quarter of a grain of morphia. The wound was dressed under the spray, a considerable quantity of blood-stained synovia having escaped. Temperature 98·6°.—20th: Temperature 99·8°. The wound was dressed. The drainage-tubes were removed, and were found filled with blood-clot; having been shortened, the tubes were reintroduced. The dressings were very little stained.—25th: There was very little discharge of synovia; no pus. Temperature 99·4°.—27th: The drainage-tubes were removed, and the antiseptic dressings discontinued, a pad of absorbent cotton-wool being put round the joint.

Dec. 4th.—The wound was closed.

Jan. 3rd, 1884.—A plaster-of-Paris splint was applied, and the patient moved about with the aid of crutches.—25th: The splint was removed.

Feb. 2nd.—Passive movement used.—11th: The patient can now bend his knee to an angle of 40° and straighten it again.

STRATFORD-ON-AVON INFIRMARY.

SURGICAL CASES.

CASE 1. *Ruptured Perineum.* (Under the care of Mr. Mason).—Jane R——, aged thirty-one, was delivered of her first child in October last, sustaining a rupture of the perineum from the fourchette back into, but not through, the substance of the sphincter muscle. On Feb. 4th, the patient being under the influence of chloroform and in lithotomy position, Mr. Mason pared the edges of the rent, bringing the parts together with six sutures, three deep and three superficial. Satisfactory union has taken place.

CASE 2. *Submaxillary Adenoma.* (Under the care of Mr. Lupton.)—Mary H——, aged fifteen, was admitted on Jan. 18th with a large tumour extending from near the symphysis almost to the angle of the jaw on the right side. She stated that it had prevented her getting a place, and was anxious for its removal. On Jan. 21st, the patient being under chloroform, Mr. Lupton removed the tumour. The posterior attachments were deep, and the facial artery was divided in dissecting them out. The wound has healed kindly throughout, but the ligature on the facial has not yet (30th day) come away. The tumour was a simple glandular tumour.

CASE 3. *Lithotomy.* (Under the care of Mr. Lupton.)—Joseph B——, aged eighteen, was sent into the infirmary on Jan. 30th, 1884, by Mr. Laughton, surgeon, suffering from calculus. He states that he had no symptoms till the middle of December, 1883, when he was troubled by a stoppage of his water. After this he had pain and trouble constantly till December 22nd, when he again had stoppage, but passed water naturally on the 23rd. About a fortnight later he again had stoppage, relieved by Mr. Laughton, who, on passing a catheter, felt a stone. Since then he has had constant dribbling of urine. On admission, the presence of a calculus was detected by a sound. Urine alkaline, contained much viscid, ropy mucus, and a few crystals of triple phosphates.—Jan. 31st: Bowels relieved freely by enema. Ordered five grains of compound soap pill at bedtime, being in much pain.—Feb. 1st: Urine alkaline, sp. gr. 1015; much mucus; no albumen. Pulse 86; temperature 98·2°. Appetite fair; tongue clean.—Feb. 6th: Urine alkaline, sp. gr. 1016; much mucus. Patient's general condition much improved. On the 8th a rise of temperature, difficult to account for, commenced. On the evening of the 9th it stood at 102°, and by noon on the 10th at 103°; by the evening of the 10th it had fallen to 100°, and on the 11th fell again to normal. On the 13th lithotomy was performed by Mr. Lupton at noon. A calculus weighing 62 grains, and measuring $2\frac{1}{16}$ in. long by $1\frac{1}{16}$ in. broad, was extracted. A momentary delay was occasioned by the stone being seized across its long axis, which was speedily set right by a finger in the rectum. A Buckston Browne's lithotomy tube with tampon was secured in the bladder and the patient put to bed. A morphia suppository was given at 5 P.M. At 9 P.M. he was sleeping soundly; there was no hæmorrhage, and a free secretion of urine passed through the tube. Pulse 70; temperature 100°. On the following day (14th) the temperature fell to 99°, and on the 15th regained the normal.—15th, noon: Tube removed. Patient doing well.—19th: First urine from urethram. The patient has since done uninterruptedly well.

CASE 4. *Incarcerated Hernia (Seven Days); Herniotomy.* (Under the care of Mr. Lupton.)—Jas. A——, aged fifty-nine, shoemaker, was sent in on February 13th by Mr. Latimer Greene. He had an old congenital hernia, which he had always been able to reduce until a week previously, and for which he had always worn a truss. The hernia was not tense, and though not reducible, the ordinary signs of strangulation were absent. A fair trial of taxis was made under chloroform; but that failing ice was applied for twelve hours, and the taxis again unsuccessfully resorted to. The patient was kept on low diet, which he failed to appreciate, and ice kept constantly applied to the tumour. A free action of the bowels followed the administration of an enema on the 13th, but the hernia was still irreducible. On the evening of the 16th, the hernia becoming more painful, and nausea setting in, Mr. Lupton, after consulting with his colleagues, decided to operate. Chloroform was administered by Mr. Norbury, and the operation performed in the usual manner, after a final attempt to reduce by taxis had failed. The hernia was found to contain cæcum and colon, and, even after the neck of the sac had been twice freely incised, was only returned with much difficulty. The operation was prolonged, and the bowel exposed to much more handling than was desirable. The temperature rose to only 99° after the operation. The bowels acted naturally on the second day; and, in fact, it may be said that the patient has recovered, so far, without any bad symptom. The wound has been only twice dressed, under antiseptic precautions, and is healthy.

AYR COUNTY HOSPITAL.

LEFT ARM TORN OFF WITH COMPOUND FRACTURE OF RIGHT LEG; RECOVERY; REMARKS.

(Under the care of Dr. W. J. NAISMITH.)

FOR the notes of the following case we are indebted to Mr. W. A. Malcolm, M.B., C.M.Edin., house surgeon.

A. G——, a well-grown boy of fourteen years, was admitted to "Oswald" ward of the Ayr County Hospital on November 28th, 1883, with the left arm torn away, and with fracture of both bones of the right leg immediately above the ankle, that of the fibula being compound, with, however, a very small wound. When brought in he was only half conscious, pale, and almost pulseless, the usual signs of grave systemic shock. It was noticed that his left pupil was widely dilated, the right being normal. The boy had wandered into a timber yard, and, at the suggestion of a comrade, placed his left arm round the shaft of a steam saw which was revolving at full speed, three feet from the ground, "just to see how it would feel." The trunk was engaged in a moment, whirled round with frightful velocity and dashed to the ground, the arm being completely torn away. No information could be obtained as to the number of revolutions before disengagement. As might have been expected, there was little or no hæmorrhage. The patient being revived by stimulants and anæsthetised, the removal of the temporary bandages revealed an ugly wound, from the centre of which protruded about an inch and a half of the spiculated upper fragment of the humerus, broken off close to the glenoid articulation, which was intact. The bruised and cord-like brachial artery, with the median and musculo-spiral nerves, hung out independently from the wound for some four or five inches, and to the same extent lay some of the exposed and ruptured muscles connecting the limb with the trunk. The fleshy masses of the deltoid, great pectoral, latissimus dorsi, and teres major were exposed with the nicety of a dissection, and the skin and subjacent cellular tissue had been cleanly removed from the entire region of the shoulder—that is to say, from the part which would be included by a line proceeding from the axilla apex forward, with a curve across the great pectoral, upwards through the centre of the clavicle, downwards to within an inch and a half of the dorsal spines, curving outwards again to join the axilla. An extensive surface was thus denuded, and skin flaps were therefore impossible.

Treatment.—The joint was not disarticulated, but the protruding portion of the humerus was removed with bone pliers close to it. The brachial artery was tied as high up as possible and cut short, a couple of deltoideal branches of the posterior circumflex also required ligaturing. The

muscles were cut short and trimmed so as to form a covering for the stump. The entire surface was treated with a 3 per cent. solution of carbolic acid, and enveloped successively with protective salicylic wool and gauze bandages. The fractured leg was placed on a McIntyre splint, elevated and swung, the malleolar wound being dressed with carbolic oil. There was a slight suppurative discharge from it for about a week, after which it gave no further trouble. For three days after the accident the condition was an anxious one. Pulse 120 and weak; temperature 102° to 103°, both morning and evening. The patient at times slightly delirious. After this he began to improve. The morning temperature gained normally on the eighth day, but that of the evening kept up for nearly a month, varying from 99° to 101°, with a pulse of 96. There was profuse suppuration of the shoulder, involving frequent dressings during that time. In five weeks he was sitting up, being carried to a chair beside the ward fire, gaining strength rapidly, with satisfactory progress in granulation of the shoulder. Nine weeks after he could walk about the ward, and showed an excellent shoulder stump, with an extensive granulating surface, presenting a good case for the trial of skin grafting. The left pupil, which was dilated after the accident, had undergone contraction to the extent of being considerably less than the normal right one.

Remarks.—Young subjects undoubtedly possess a facility for outliving grave injury; and in consideration of the manner in which this particular one occurred, the recovery from it is, perhaps, less a matter of surprise than the circumstance that the boy was not killed on the spot. The fractured limb was evidently the result of violent contact with the ground during the rapid revolution of the body with the machinery, and to the resistance thus offered is probably due the fact that the injury was one of fracture at or near the surgical neck of the humerus, instead of evulsion at the glenoid articulation, as in the classic windmill case of Cheselden.

Medical Societies.

PATHOLOGICAL SOCIETY OF LONDON.

Juvenile Osteomalacia.—Bone Disease in Animals.—Ulceration of Small Intestine and Disease of Skull.—Acne Keloid.—True Cystic Disease of the Liver, with Yellow Fever and Tuberculosis.—Chondro-Epitrochlearis Muscle.

THE ordinary meeting was held on April 1st, Mr. J. Whitaker Hulke, F.R.S., President, in the chair. The papers on Bone Disease were most interesting.

Mr. DAVIES-COLLEY read a paper on Juvenile Osteomalacia, or (?) Late Rickets. The patient was a female, aged thirteen, who was admitted into hospital in June, 1883. At the age of three years she lived and slept in an underground kitchen, where her mother also washed clothes; she was always pale, thin, and delicate. A waddling gait was early noticed; she had chilblains, and complained severely of the cold. Soon after the ankles grew outwards and the knees inwards. Later on the humerus was broken. In Oct. 1880, the femur was fractured; tenderness of limbs and flexibility of tibiæ were observed, and the bones could be pitted by pressure, much as in the case of cranio-tabes; the lower jaw was first swollen and elastic, afterwards it became consolidated. The urine contained a sediment of triple phosphates and pus-corpuscles. A quantitative analysis showed that the phosphates were very deficient, not more than one-third of the normal, and calcium salts were in excess. Many phosphatic calculi formed in the pelves of the kidneys, and suppurative pyelitis was set up. Drawings were handed round showing enlargement of the head, and the upper extremities being much twisted and distorted. The ribs were a little beaded and the epiphyses enlarged. Both kidneys were enlarged, and the right one had suppurated. Some of the bones were hypertrophied and very dense—e.g., the skull. The other bones were light, friable, and porous. The lower jaw was thickened, hard, and dense. The vertebræ were somewhat softened, and there was slight lateral curvature. The pelvis was small, its left ala enormously thickened, a section had an almost gelatinous appearance; the right ala was not much thicker than paper; the pelvic basin had a trefoil shape. The ribs were very thin. On the inner surface of the fourth and fifth ribs something like an enchondroma was seen, almost pedunculated, which really seemed to be callus formed from a fracture of the fourth rib. The bones of all the limbs were bent. The epiphysial line showed the changes characteristic of rickets. The relationship of this case with rickets was pointed out; in other respects osteomalacia seemed dominant. He rather concurred with the views of Trousseau that these conditions were different expressions of the same disease. The uselessness of the various remedies against rickets was in favour of the case having been one of osteomalacia.—Mr. CHARTERS SYMONDS spoke of the microscopical appearances. The main point in the femur and tibia was the absence of Haversian systems. The cancellous structure was filled with fibrous tissue. The periosteum was closely adherent to the bone. The swelling on the ilium was covered with a thin layer of bone. Many multipolar cells, with branching processes, were seen in sections placed under the microscope. No cartilage was present in the swelling on the ribs; here there was rapidly developing bone, as in a membranous ossification. None of the usual appearances of osteomalacia were to be seen. The edge of the bone was quite abrupt. The bone was not well developed. Cornil and Ranvier described in late rickets great porosity of bone with fibrous medulla, as in these specimens.—Mr. HULKE said that the presence of calculi in the kidneys was a fact new to him in connexion with osteomalacia, many cases of which he had seen in adult females.

Mr. BLAND SUTTON read a concluding paper on Bone Disease in Wild Animals, in which he hoped to be able to set the question of age at rest. Rickets is exceedingly common among carnivorous animals, especially the smaller sized ones; the conclusions arrived at were founded on the examination of some thirty cases. Rickets in infancy was illustrated by the history of the progeny of the rare and pretty little animal Cynictis. One died at the age of three months, a second at four months with well-marked signs—beaded ribs, deformed thorax, thickened bones, enlarged epiphysial lines. It was concluded from a large number of observations that "rickets of infancy" attacks chiefly the appendicular skeleton, the thorax, and occasionally the skull. Infractions are common among the ribs. "Late rickets" in the lion next occupied attention. When purchased, a lion had defective teeth, which further never made their appearance properly, though it was under observation for more than a year. Paraplegia appeared some months before death. Post-mortem examination revealed a thick skull, beaded ribs, defective but large teeth, and enlargement of the epiphysial lines of the vertebral centra, due to fibrous tissue; the invertebral discs had grown so as to encroach on the neural canal and nip the spinal cord, hence the paraplegia. The age of the animal corresponded to puberty in the human subject. This form most commonly attacks the axial skeleton; it may affect the spine and thorax only, or may be limited to the vault of the cranium. Infractions, too, are frequently seen in the ribs. The third form occurs in mature animals, and is rare. The skeleton presents considerable deformity, but the bones are brittle, the compact tissue is thin, the medullary and cancellous spaces large, and containing diffluent medulla. The teeth fall out from extensive absorption of the alveolus. Paraplegia is a prominent symptom. The bones, when macerated, are as light as cork. This variety might be termed adult rickets of animals. In another manifestation of the disease of doubtful explanation there were softening of bones, with enlargement of epiphyses, bulgings of the diaphyses, and filling of the medullary cavities with a fluid oily material. In the *Bulletin Mensuel de la Société Nationale d'Acclimatation de France* for July, 1883, there is a paper "Sur l'Acclimatation et la Domestication d'un petit Rongeur Originaire des Haut Plateaux Algériens," by M. Ferdinand Lataste. The Dipodillus Simoni is a small rodent of the same family as our rats and mice (Muride). It produces all the year round, irrespective of seasons. The duration of gestation is generally twenty days. The young arrive at puberty about the second month, but sexual intercourse does not bear fruit until between the fourth and ninth months. With regard to fecundity, one female had for one year ten deliveries, yielding fifty-two young ones, of which seventeen died. The malady acted more rapidly upon the animals according to the length of time they had been in activity. Those born in the desert lived two years before they were affected. The next lot were

attacked at the age of six months; others born a year later than these died of the disease at the age of three months, whereas the offspring of the same parent at the end of the same year succumbed about the fifty-second day. The disease had two aspects. First, rickets, which commenced about the thirty-fifth day; second, osteomalacia, which is the tendency of the disease in the adult. At the autopsy the bones could be cut like gelatine. Of the adults, the females perished first, no doubt because they have to furnish calcareous material for their young. Lataste concludes that rodents in captivity are liable to a malady of which the severity increases with the time they have been in the captive state—rickets in the young and osteomalacia in the old. The disease consists essentially in an alteration of the bones either by absence of assimilation or by resorption of the calcareous salts. As in the human female, osteomalacia was associated with frequent pregnancies. Captivity and bad hygiene give rise in quadrumana, carnivora, and rodentia to rickets of infancy and puberty, and a disease resembling osteomalacia in the old animals, the difference in the manifestations of the disease being due to the altered physiological condition of the skeleton incident to the three phases of life—infancy, puberty, and maturity.—Mr. ARBUTHNOT LANE spoke of a paper which he had recently read. In the specimens which he had shown the early changes of osteomalacia as seen in the skull were well represented. He said that as decalcification took place nature tended to develop new bone. He also thought that fractures were not true ones, but were due to a local increase of decalcification. He brought forward a specimen of a hyoid bone showing softening and false joints at the junction of the greater cornua with the body of the bone. This was taken from the body of an old woman who also had false articulations all down the sides of her chest. — Professor HUMPHRY considered that in rickets there was not so much increased proliferation of cartilage as deficiency of calcification; so he differed from Virchow as he understood his teaching. The epiphysial lines might not only be thick but bulged laterally. In rickets there was a diminution of material, which might run on to a condition of mollities. Besides this, there was a porous bony addition, more especially seen in the skull.

Dr. FRED. TAYLOR showed a living specimen of Double Chondro-Epitrochlearis Muscles. Messrs. Wood and Macalister had fully described these morphological specimens.—Mr. CLEMENT LUCAS spoke of a similar case in which he had divided the tendon.—Mr. JOHN WOOD said the muscles were not symmetrical. He had found in the dead subject a slip frequently starting from the osseous portion of a rib. The muscle was well developed in those anthropoid apes of arboreal habits.—Prof. HUMPHRY thought such cases arose from a variety of segmentation from the great primitive arrangement of muscular tissue. In many of the lower apes the latissimus dorsi was largely blended with the triceps. He agreed with Mr. Wood in regarding such muscles as remnants resulting from an imperfect morphological development from lower types.

Dr. NORMAN MOORE showed a Skull-cap and Small Intestine, representing syphilitic lesions, taken from a woman aged forty-six, who died in St. Bartholomew's Hospital in Dr. Gee's ward. The calvaria was very adherent to the cranial fascia, and showed a node on its external surface. On the inner side of the right parietal bone was a bare patch, corresponding to which there was a dense local thickening of the dura mater, a partly degenerated gumma. The intestines were distended with fæces, though there was no single obstructed point. In the small intestine were numerous thickened patches, some ulcerated, some showing scar tissue and contraction, and some consisting of fresh connective tissue. The mesenteric glands were not enlarged. The liver was small. It showed many scars and one recent gumma. The kidneys were small and granular, but without scars. There was a double pyo-salpinx. There had clearly been long-continued obstruction at several points in the small intestine, for between the ulcerated places there was a slight general thickening of the intestinal wall. There was no amyloid disease. Visceral syphilis, though a rare cause of obstruction in the upper part of the large intestine, was of much rarer occurrence in the small intestine; and there was no similar specimen on record in the medical post-mortem books at St. Bartholomew's Hospital.

Mr. ROGER WILLIAMS showed the photograph of a stout, healthy-looking woman, aged fifty-three, with a Keloid Tumour, six inches by two, extending transversely across the back of the neck at the junction of the skin and hairy scalp. It presented a smooth, shiny, reddish appearance, and its surface was sharply pitted with follicular depressions, out of which projected tufts of bristly hairs, giving the disease its characteristic appearance. On pressure it was firm and tender, and quasi-caseous matter exuded from the follicles. It began without any injury or other known cause, as a small pimple, five years previously. It was painted with a solution of iodine and collodion, and after some time became smaller and less tender. Sections showed a new growth of dense fibrous tissue in the deep part of the corium. Permeating this were numerous large vascular channels filled with leucocytes, but there was no small-celled infiltration of the surrounding fibrous tissue. Mr. Williams considered the disease to be merely a variety of the keloid of Alibert, and to differ essentially from the disease described by Kaposi under the name of dermatitis papillomatosa capillitii, which consisted of a chronic inflammation of the corium.

Dr. HALE WHITE brought forward a case of true Cystic Degeneration of the Liver in association with Yellow Fever, for which specimen he was indebted to Inspector-General Lawson. On making the post-mortem examination on a soldier, who in 1860 died in Jamaica from a severe attack of yellow fever, it was found that the liver was full of holes in some parts of its substance. Specimens of this organ were put aside and forwarded to Dr. Hale White a few weeks ago. Microscopical examination showed the condition to be exactly the same as in the previous cases which had been brought before the Society—namely, the process consisted in the occurrence of small vacuoles simultaneously in many hepatic cells. Soon, these vacuoles running together, larger cavities were formed, visible to the naked eye; these contained the remnants of the broken down hepatic cells. It was pointed out that this condition could easily be distinguished from fatty change in the liver by not staining with osmic acid, and also from post-mortem decomposition, which produced a spongy condition of the organ by not containing air bubbles. The points of distinction between cysts due to vacuolation and those due to dilatation of the ducts, are that in the latter case there will be a cause for the constriction of the ducts, and if the cysts are numerous they will contain bile pigment, those that do not being usually congenital, large and single. A liver, full of cysts as a result of cirrhosis, was shown to the Society; under the microscope the differences were very marked. Out of four cases of cystic liver brought to the Society by Drs. Savage and Hale White two were in lunatics who had every organ in the body cystic, one was in a case of pelvic abscess, and the last in a case of yellow fever; this showed that the condition was not associated with any particular disease, nor did it throw much light on the debated question whether the condition when associated with cystic kidney had the same cause, or whether the association was fortuitous. The microscopical appearances proved that the vacuolation could not be looked upon as congenital. Specimens were shown of that very rare condition in which tubercular deposit in the liver breaks down so that small cavities are formed; these are never larger than a pea, they are quite exceptional, and occur only in children. They ought not to be confounded with vacuolation.—Dr. NORMAN MOORE asked how long after death the post-mortem examination was made in the West Indies. He was not at all convinced that this change was not due to putrefaction.—Mr. J. B. SUTTON concurred with the view of Dr. Moore. He had examined many wild boas, snakes, and tigers; in these the livers were vacuolated, and the vacuoles contained broken-down liver tissue with putrefactive bacilli, even though the examination was made only one hour after death.—Dr. MAHOMED spoke in favour of Dr. White's contention. "Like masses of fermenting dough" was the phrase applied by Dr. Moxon to the liver with the vacuolation of putrefaction.—Dr. WHITE said the autopsy was made from four to six hours after death. He firmly maintained his propositions.

The following card specimens were shown:—Dr. Charlewood Turner: (1) Obstruction of one Coronary Artery; (2) Free Coagula in Pulmonary Vein; (3) Mitral Stenosis with Necrosis of Valves. Mr. Arbuthnot Lane: (1) Spine from a case of Spastic Contraction of Sterno-mastoid; (2) two cases of Fusion of the First and Second Thoracic Ribs and Cartilages, and one in which the cartilages of the cervical ribs had fused with those of the first thoracic. Mr. Clement Lucas: Kidney from Nephrectomy. Dr. Goodhart, for Dr. Pye-Smith: Carcinoma in a Cirrhotic Liver.

CLINICAL SOCIETY OF LONDON.

Rheumatism and Typhoid Fever.—Dislocation of Spine treated by Extension and Plaster Jacket.—Neuralgia after an Injury treated by Trephining.

SIR ANDREW CLARK presided at the ordinary meeting of this Society held on the 28th ult. A number of members joined in the discussion on Dr. Finlay's paper. The surgical papers possessed considerable though undeveloped (so far as debate was concerned) medical interest.

Dr. FINLAY read notes of five cases of Enteric Fever associated with Rheumatism, the first of which may be taken as a type of the whole. The patient was a man aged twenty-four, a porter by occupation, admitted under his care into the Middlesex Hospital for acute rheumatism on October 1st, 1883. There was a strong family history of rheumatism, and the man himself had had one severe and several slight previous attacks. For a week before admission he had complained of pain, redness, and swelling in the ankles, knees, and hips, the ankles being still affected on admission. His pulse was then 83; temperature 101·4°; tongue slightly coated, and there was a systolic murmur audible over the præcordia. The evening temperature on the day of admission was 103·4°. Treatment consisted of salicylate of soda in fifteen-grain doses, with cotton-wool to the painful joints, under which he rapidly improved. His temperature became normal on October 5th, when he was also free from pain; and he appeared quite convalescent and was allowed to get up on the 13th. He continued to improve till the 19th, when he complained of stiffness in the back and headache, and his evening temperature was found to be 102·6°. Next evening it was 104·2°, and from this time onwards the case presented the usual features of one of enteric fever. Rose-coloured spots were observed on the 25th and following days; diarrhœa set in on the 28th; and on the 29th perforation took place, and he died on the 31st. At the post-mortem examination there was found general peritonitis, the result of a perforation through the lower part of the ileum. Two principal ulcers were found in the small intestine, the one that had perforated, free from slough and with undermined edges; the other, with clean granulating base, to which the edges were adherent, clearly of more remote formation than the former. In order to establish the diagnosis of rheumatism, attention was drawn to the redness, swelling, and pain in the joints, the sour sweating, the endocardial murmur, and the history of previous attacks. As to the enteric fever, it appeared probable that it and the rheumatic attacks were co-existent on the man's admission to the hospital, the former being so slight as to be completely overshadowed by the rheumatic manifestations. The fatal attack was therefore a relapse; and this was attested by the different ages of the ulcers in the ileum and by the course of the temperature. Of the four other cases, one, which was fatal, presented very similar features, the fatal result here being also due to perforation of the bowel, which occurred during a relapse. The remaining three presented no special features except the fact of enteric fever following upon an attack of rheumatism. Notwithstanding the fact that no mention was made, even in recent writings, of the occasional association of these two diseases, such association did not seem to be very infrequent. In connexion with this view, it was a point of some interest that of seven patients in whom enteric fever became developed in the wards of the Middlesex Hospital over a series of years, five were admitted for rheumatism. Such cases as those recorded suggested the inquiry whether there existed a more than casual connexion between rheumatism and enteric fever—an attack of one predisposing to an attack of the other. As regarded the fatal cases, the question arose whether the allowance of solid food after the rheumatic attack passed off was in any degree responsible for the death by perforation. Two practical points seemed to be deducible from such cases: First, that as solid food might increase the danger of perforation in enteric fever, cases of rheumatism occurring in the course of an epidemic of enteric fever deserved a more than usually narrow scrutiny, lest they should turn out to be something more than rheumatism merely; and, second, that if any close connexion between the two diseases, such as that hinted at, should be found to exist, rheumatic cases should not be placed in close proximity to cases of enteric fever. Although the facts were insufficient to prove a predisposition, they at least suggested a case for further inquiry.—Sir ANDREW CLARK asked whether Dr. Finlay regarded the two diseases as co-existent, or as different results of one and the same cause.—Dr. DOUGLAS POWELL also inquired whether the two maladies were regarded as manifestations of the same disease. He had seen three cases bearing on the question. In one case, on the fifteenth day of the disease, typhoid symptoms were present, with signs of rheumatic fever. Some hæmorrhage from the bowels occurred on the forty-second and fifty-fourth days of the illness. A relapse of the typhoid fever followed; the case ultimately recovered. The second case was one of typhoid fever, which apparently resulted from exposure to sewer gas. Pericarditis and other signs like those met with in rheumatic fever existed in the course of the fatal disease, which all agreed was enteric fever. A third case was referred to. There was no break between the rheumatic signs and the symptoms of typhoid fever. The first instance showed the signs of rheumatism during the prodromal stage. He considered that these cases of mixed nature were really new diseases, since, so far as he knew, they had only recently been met with.—Dr. DE HAVILLAND HALL had seen a case recently in a girl, aged twelve, who had suffered from rheumatic phenomena for ten days or so. He diagnosed enteric fever from the tumid abdomen, diarrhœa, and fairly marked rose spots. Rheumatism associated with typhoid fever preceded that disease; whereas in connexion with scarlet fever, rheumatism followed the fever. — Dr. BERNARD O'CONNOR had met with rheumatic phenomena preceding diphtheria and enteric fever.—Dr. HADDEN mentioned a case of enteric fever which presented tonsillitis and an attack of acute rheumatism towards the end of the disease.—Dr. SEYMOUR TAYLOR thought the discussion wandered from the subject of the paper.—Sir ANDREW CLARK remarked on the variable character and duration of the prodromal period of typhoid fever. Various manifestations might arise during this period, which might extend over six weeks. Did rheumatic fever predispose to typhoid? There at any rate seemed to be a close kinship between rheumatism and enteric fever. In his belief rheumatism very often followed on typhoid fever. He in a measure concurred with Dr. Powell, and believed that new diseases and complications were to be expected.—Dr. FINLAY replied that the continuity of the ill-health was completely broken, and so it was difficult to regard the rheumatism as occurring in the prodromal stage of typhoid fever. In all his cases the typhoid fever probably followed the rheumatism.

Mr. N. DAVIES-COLLEY read notes of a case of Dislocation Backwards of the First Lumbar Vertebra, which was successfully reduced "under ether." A shipwright, aged fifty-five, was stooping at his work when a mass of iron, weighing 7 cwt., fell upon the small of his back. He was at once admitted into Guy's Hospital. He was collapsed, but quite sensible. The spine of the first lumbar was three-quarters to one inch behind that of the last dorsal vertebra. The adjacent spines were even and formed a continuous series, those above at a level considerably anterior to those below. There was no motility nor crepitus to be detected upon gentle manipulation. He could move his legs, but the right somewhat less than the left. There was impairment of sensation on the outer side of the right leg, and complete loss upon the dorsum of the right foot. Soon after admission, extension was applied under ether. Mr. Davies-Colley kept his hand upon the prominence while three assistants made traction upon the legs. The projection was thus gradually reduced without any jerk; at the same time some crepitus and motility could be felt in the last dorsal spine. A plaster-of-Paris jacket, similar to the laminated form recommended by Mr. Furneaux Jordan, was applied in the horizontal position, while traction was still being made upon his legs. When he recovered consciousness he was quite comfortable. A more careful examination, two days later, showed that the right musculo-cutaneous nerve was completely paralysed, and there was some loss of sensation between the first and second toes, where they are supplied by the anterior tibial nerve. For ten days he was unable to micturate, and some small bedsores formed over the sacrum, although within two days of the accident he could turn over in bed and lie upon his side. On the thirty-fourth day after the accident the splint was removed. The line of the spine was then quite even. There was no deformity, and little, if any, tenderness. In less than two months after the accident he was able to walk, but he was still unable to evert his right foot. With the help of fara-

disation he gradually recovered power and sensation, and when he was last seen, in October, no difference could be detected between the movements of the two legs, and the only abnormality in sensation was a slight numbness in the middle third of the outer side of the right leg.—Mr. THOMAS BRYANT said surgeons had hardly sufficiently recognised the form of practice which this case illustrated. The case of a man aged seventy-four, who fractured his spine from the fall of a sack of wheat on the nape of the neck, was mentioned. Paralysis of the lower extremities, priapism, pain down the right half of the body, marked projection of the third dorsal spinous process, fracture of the sternum, were the abnormal signs detected, and it was thought that fracture with displacement of the third dorsal vertebra had taken place. Extension and counter-extension were practised, a sudden click was heard and felt, and the patient was certainly relieved. On the third day anæsthesia and paraplegia were found to be complete. The patient, however, died on the seventh day, and the diagnosis was practically confirmed. Perhaps in a younger man the result might have been different.—Sir ANDREW CLARK inquired of the state of the superficial reflexes in this case.—Mr. BRYANT did not remember their condition.—Mr. HOWARD MARSH briefly related a case of dislocation of one of the lower dorsal vertebræ treated by extension.—Mr. ARTHUR DURHAM said he no longer looked upon spinal fracture as the hopeless cases he once did. With regard to the early application of a jacket of plaster-of-Paris, he considered that where anæsthesia was present and where there was a risk of bedsores following, it would be unwise to have resort to it. Later on it might be used with advantage.—Mr. DAVIES-COLLEY, in reply, said that the objection advanced to the plaster-of-Paris jacket could not hold good in his case for the reason that anæsthesia was not present in the back, and so there was but little danger from bedsores.

Mr. ARTHUR E. DURHAM read a paper on a case of so-called Frontal or Supra-orbital Neuralgia following injury, successfully treated by trephining after failure of other methods of treatment. The patient, a man aged thirty-three, was admitted into Guy's Hospital in Oct. 1882. A year previously he had been knocked down and kicked on the forehead by a horse. An external wound was produced, extending from about an inch and a quarter to two inches or rather more above the left external angular process. The wound soon healed. Two or three months afterwards he was thrown out of a cart, and fell upon his head. He walked home, a distance of four miles. Soon after getting into bed he began to suffer from intense pain, extending from about the seat of the cicatrix of the old wound towards the top of his head. This pain remained more or less persistent, distracting exacerbations occurring from time to time. His condition became most pitiable; he was altogether incapacitated from attending to his business, and his general health began to suffer. He tried in succession an immense number of medicines and external applications, but without benefit. On Oct. 23rd Mr. Durham excised about half an inch of the external branch of the supra-orbital nerve, and forcibly pulled both the proximal and distal portions. It seemed that the pain occupied the area supplied by this nerve. No relief followed this operation. On November 17th Mr. Durham again operated, and dissected out and excised portions of other branches of the supra-orbital nerve, and some plexiform filaments of communication between these nerves and the auriculo-temporal. The pain remained as severe as ever, though the area over which it spread was more limited. The patient was now sure that the pain started from a spot in the bone very nearly beneath the cicatrix of the original wound. He was ready and anxious to submit to any operation, even at the risk of his life, to be relieved from his agony. Under these circumstances, Mr. Durham trephined the frontal bone at the spot indicated. The portion of bone removed was about an inch in diameter. From the time of this operation to the present he had been entirely free from his old pain. The portion of bone removed was apparently healthy in every respect. It was not obviously thickened, nor indurated. It showed no signs of fracture, nor were there indications of suppuration, old or recent, beneath it. On subsequent examination a small depression was found on the internal surface, close to the margin, but this was believed to be only one of those little pits or depressions commonly met with on the internal surface of the adult skull. It was possible, however, that there might have been some small papillary or other outgrowth from the dura mater, involving some highly sensitive nerve filaments, and hence the pain. But there was no evidence of this to be obtained. There was a little bleeding from the dura mater, which was easily arrested, and the dura mater then presented a normal, healthy appearance. The wound was dressed, and subsequently treated in the ordinary way. No bad symptoms of any kind supervened. The wound filled up by granulation, and the patient steadily recovered. He left the hospital on Feb. 28th, speedily regained health and strength, and was soon able to resume his ordinary avocations. He was last heard of two days ago (some fifteen months after the operation), and reported himself as quite well and entirely free from all pain. Though the result of the treatment was so successful, Mr. Durham considered it would have been more satisfactory if the cause of the pain could have been discovered and definitely ascertained. He thought the case was allied to those well-recognised cases classed together under the designation osteitis neuralgica, although in almost all of such cases it was one or other of the long bones affected, and as a rule there was marked thickening and induration of the bone. Mr. Durham further thought that his case might be taken as illustrative of the comparative immunity with which the skull might be trephined in cases in which there was a prospect of benefit resulting from such operation—an operation the dangers of which he believed to be very much over-estimated. He had brought the case forward, not with the idea of advocating for one moment the adoption of any such severe measures in ordinary cases of supra-orbital neuralgia, but rather to illustrate the good that might be effected by well-directed surgical interference in certain cases in which medicines internally and applications externally proved altogether useless.—Mr. WALSHAM spoke of a somewhat similar case which occurred in a young woman aged twenty-two, who had had a compound fracture of the skull, which was relieved by trephining and the removal of some pieces of bone. He had collected thirty cases in the St. Bartholomew's Hospital Reports. About half the number resulted from an injury. About two-thirds were relieved by operation. Five deaths were reported, but probably were not entirely due to the operation. In the majority of cases no anatomical cause was found to explain the neuralgia. In two cases a body like a Pacchionian gland was detected; in others a little thickening of tissues. Mention was made of a case which was associated with a small ivory exostosis and hysteria. Another instance was narrated in an engine driver; the question was where to trephine, though it seemed clear that the pain was the result of the injury.

The following living specimens were shown:—Dr. Willcocks, Paralysis of the Fourth and Fifth Cranial Nerves. Dr. Seymour Taylor, a Man with Dilated Superficial Veins over the front of the thorax. Mr. Bernard Roth, an unusual form of Lateral Curvature. Mr. Edmund Owen exhibited a Plate of Six Teeth with two hooks which had been swallowed and successfully passed per anum.

MEDICAL SOCIETY OF LONDON.

Compensatory Hypertrophy.—Retroversion of Gravid Uterus.

THE ordinary meeting of this Society was held on Monday last, Mr. Arthur E. Durham, President, in the chair.

Dr. JOSEPH COATS (Glasgow) read a paper dealing systematically with Hypertrophy of the various organs. In some preliminary remarks he observed that it was necessary to bear in mind the difference between hypertrophy and hyperplasia, though it was not possible to carry the distinction into practice. Practically it was sufficiently accurate if under the term hypertrophy we included all forms of increase in the quantity of functionally active tissue of an organ, whether this was due to numerical increase of the elements of the tissue or to an increase in the bulk of the individual elements. Compensatory hypertrophy occurred most readily during the period of growth; the causes by which it was produced were of two classes—excessive performance of normal function and destruction of portions of tissue resulting in overgrowth of the remaining portions. After referring to hypertrophy of the heart, bladder, and various parts of the alimentary canal, he discussed at length the occurrence of hypertrophy of one kidney after the removal of the other, quoting the experiments and conclusions of Rosenstein, Grawitz, Israel, and Gooden, and relating some observations of his own. The general results of these researches seemed to establish that the glomeruli were not increased in

number, and not greatly in size (the increase being in the proportion of 41 to 30 or 8 to 5, according to various observers), but the enlargement was chiefly due to an increase in the thickness and bulk of the epithelium, but chiefly to increased length, and therefore increased convolution of the tubules. This, he thought, went to support the theory that the convoluted tubules discharged the most important functions of the kidney. In dealing with the subject of hypertrophy of the lungs, he quoted the researches of Dr. Theodore Williams, and detailed a case of vicarious hypertrophy of one lung from defective development of the other. After a full discussion of this subject, in which he observed that compensatory hypertrophy rarely occurred in phthisis, probably owing to the general depression of nutrition, he shortly referred to the occurrence of hypertrophy of the liver secondary to destructive disease, and observed that it was due to enlargement of the lobules from multiplication of the hepatic cells.—Dr. DOUGLAS POWELL differed from the author in respect of compensatory hypertrophy, as it was seen in phthisis; he considered that in such cases hypertrophy could occur. No doubt in some instances the lung remaining did not become hypertrophied but only dilated, and then the patient was breathless and weak. Hypertrophy of organs beset us in all directions. Instances in the heart and stomach were mentioned.—Dr. FANCOURT BARNES spoke of the hypertrophy of the heart in pregnancy as a typical example of physiological compensatory hypertrophy.—Dr. KINGSTON FOWLER alluded to cases of hypertrophy and dilatation of the ascending colon associated with ulceration, but no obstruction. Was there general cirrhosis in the case of syphilitic hepatic disease?—Dr. JOSEPH COATS, in reply, thought that he had admitted in the paper the possibility of the occurrence of compensatory hypertrophy in cases of chronic phthisis. In diabetes insipidus he considered that all the secretory structures were at work, and so tended to become hypertrophied. There was no general cirrhosis in the instance of syphilitic disease of the liver which he had mentioned. He had no experience of cardiac hypertrophy in pregnancy, but regarded the line between physiology and pathology as by no means a hard-and-fast one.

Dr. CLEMENT GODSON read a paper on Retroversion of the Gravid Uterus, in which he reviewed the early literature on the subject. He pointed out that it had been referred to by Ætius Adimenus in 1535, and by various writers in the eighteenth century. He dwelt especially on the classical paper of Dr. William Hunter, read before the Medical Society in 1770. Dr. Godson stated that the primary cause of the condition was the occurrence of pregnancy in a uterus prolapsed and retroverted in a capacious pelvis with a narrow brim. The signs and symptoms which were of special diagnostic importance were thoroughly considered. He related a case of extra-uterine fœtation, which had been mistaken for retroversion of the gravid uterus. The several proposals for treatment which had been suggested were mentioned, and Dr. Godson strongly recommended that the uterus should not be left to rectify itself, but that immediate reposition should be attempted. The means to be used to carry out this treatment were given in detail. Polyuria following the original distension of the bladder was illustrated by the notes of a case, and two specimens of mucous membrane of the bladder exfoliated after cystitis were shown. The author concluded by pointing out that where death occurred it was almost invariably from exhaustion associated with blood poisoning, or from uræmia, and not from peritonitis.—Mr. GRIFFITH thought that alteration of the conjugate diameter could only influence the occurrence of retroversion of the gravid uterus by altering the period of its occurrence.—Dr. C. H. ROUTH alluded to the part played by the conjugate diameter in the causation of the mischief, and advocated the use of the vectis sometimes in the treatment.—Dr. GODSON briefly replied.

EPIDEMIOLOGICAL SOCIETY.

Etiology of Cholera.

AT a meeting of this Society on Wednesday, March 12th, Dr. Norman Chevers, President, in the chair, a paper was read by Dr. GEORGE GULLIVER, of which the following is an abstract. He said that though the mode of origin and propagation of cholera had been raised during the debate on Sir Guyer Hunter's report, it was in reality a side issue, that paper being concerned only in showing that the disease was not imported into Egypt, the story of its having been so imported having no foundation in fact, and the disease being endemic in the country at a period long antecedent to the outbreak. At the request of the President, he had brought forward a few of the facts bearing on the etiology of cholera generally, without special reference to Egypt. He thought that few would deny that cholera is a specific disease; probably no great number would object to its being called a specific febrile disease. The ordinary symptoms and pathological appearances necessary to complete the definition were not dwelt upon, as being well known, at all. The value of a knowledge of the anomalous and latent cases in investigating the etiology of specific diseases was then dwelt upon, and it was held to be a great cause for regret that so little was known of such cases, the reason for this being obvious. The consequence was that our knowledge of the etiology of cholera was in a very much more backward condition than in the case of other specific diseases. Assuming that cholera is a specific disease, he had no hesitation in saying that it depended on a specific poison, which entered the body from without. The principal views on the mode of propagation of the disease were then enumerated. First, that it is contagious; secondly, that it is never contagious, and that the poison is generated and propagated indepenently of man; thirdly, that of Pettenkofer, who considers that it is contained in the excreta, but requires the soil to act as an intermediary host before re-entering the body of man; and fourthly, certain views less definite than the foregoing. He then insisted on the great importance of the predisposing and exciting causes of the disease, so great that we might almost be in danger of mistaking them for the specific poison itself. Probably the *rôle* played by them was without parallel in the history of specific diseases in which the poison enters the body from without. A comparison was made with what takes place in gout, where the exciting causes play such an important part in rousing into activity the poison latent in the blood, the difference being that in the case of cholera the poison was not in the blood but in the surroundings, only wanting a predisposing or exciting cause to enable it to enter the system. The question of a definite particulate contagium was then dwelt upon in entering upon the discussion of the first view, which holds that the poison is communicated from man to man. For the present, at any rate, it was thought that we were not in a position to say that this had been demonstrated; but it was pointed out that an apparent apathy exists in the search after similar organisms in enteric fever, the reason being that the contagious nature of that disease was firmly established apart from the demonstration of any organism. Insanitary conditions had performed for us many experiments on human beings, and it remained to be asked whether they had not done so in the case of cholera also. It was held that they had done so, and the well-known outbreaks in Broad-street, and at Theydon Bois, and other facts in relation to its spread in Europe and to America were adduced as evidence, it being pointed out that one positive fact is worth a great many negatives. The second hypothesis, which denies the propagation of the disease from man to man, was then passed in review; and it was pointed out that those who hold it seem to regard the poison as of a partly atmospheric and partly telluric nature, some of them apparently claiming for it an affinity with the malarial poison. That no such relation exists was insisted on, inasmuch as the one is the type of an epidemic and the other of an endemic poison. The subject of an "epidemic constitution" was then discussed, and it was freely admitted that there are cosmic conditions which at times greatly modify the character of epidemics; but this is just as true of epidemics of disease which are virulently contagious, such as small-pox, as of those which were doubtfully so. It was further shown that no hypothesis except that of an epidemic constitution would account for the spread of cholera in 1870–73 throughout Europe. No doubt such conditions played a very important part in the spread of cholera, which, being admitted, prevented the author from believing that the theory of its spread by contagion was inadequate. He thought that the difficulties in explaining outbreaks in the East arose largely from the simplicity of the manner in which the natives lived, the complexity of the problem which presents itself to the sanitary investigator increasing in exact ratio with the primitiveness of the customs prevailing. For this reason our knowledge of the etiology of enteric fever would probably be still on an

unsatisfactory footing if it rested on observations made in Eastern countries alone. In conclusion, Dr. Gulliver briefly referred to the Egyptian outbreak, pointing out that, though it afforded no conclusive evidence on the question to be discussed, yet such evidence as it did afford by no means weakened the opinion that cholera was a contagious disease. In the discussion which followed Sir Joseph Fayrer, Sir Guyer Hunter, Sir William Smart, Drs. Murray, Lawson, Scriven, Balfour, Aeland, and Dennis took part.

MEDICAL OFFICERS OF HEALTH SOCIETY.

A MEETING of this Society was held at 1, Adam-street, Adelphi, on Friday, March 21st, Dr. T. O. Dudfield in the chair.

The PRESIDENT introduced the subject of Offensive Businesses by calling attention to the appeal case of Passy *v.* Oxford Local Board, in which the late Lord Chief Justice Cockburn and Mr. Justice Lopes had upheld the decision of the magistrates at a petty session at Oxford that the business of the appellant (Passy), a rag and bone merchant, carried on by him at Oxford, was as a matter of fact a noxious and offensive one, and as a matter of law was of the same character as the six trades specified in Section 112 of the Public Health Act, 1875. He argued, therefore, that the said business was of the same character as the trades enumerated in Section 3 of the Slaughter-houses (Metropolis) Act, 1874, and gave reasons for the opinion that the business of a rag and bone merchant should be scheduled and regulated under that section and carried on under bye-laws as the only effectual way of preventing recurring nuisance. He added that the local authority (Metropolitan Board of Works) had declined to schedule the business on the application of the Kensington vestry, on the ground that "the businesses to which the Act of 1874 refers are businesses which include processes of manufacture of a more or less offensive character, and that it did not appear to the Board that the mere collection of a mass of refuse matter into one place was a 'business' within the meaning of the third section of the Act." But in the Oxford appeal case the judges had arrived at a different conclusion, deciding that a "business, in order that it may be brought within Section 112 of the Public Health Act, 1875, should be *ejusdem generis* with those specified in that section." Dr. Dudfield remarked that, in addition to bones and other forms of animal matter, at many of these shops, large quantities of fat, often in a foul and offensive condition, were collected prior to removal to the fat-melter; and he urged that if the business of a rag and bone merchant were regulated by bye-laws all offensive matters would have to be so stored that they could not become a cause of nuisance.

Mr. G. H. FOSBROKE, medical officer of health to the Stratford-on-Avon Combination of Sanitary Authorities, read notes on some Suspicious Cases of Copper Poisoning. The author stated that in May last he was informed that diarrhœa was prevalent among the inmates of the Union Workhouse, situated in an agricultural district, and was requested to inquire into the matter. He visited the institution with as little delay as possible, in company with the medical officer in charge, and took the necessary evidence; in doing so, however, considerable difficulty was encountered, as the superintendent was an unwilling witness. At the date of his visit there were 123 persons residing in the building, and among them diarrhœa had been most persistent. On the day of the inquiry seventeen patients were under treatment; four of them were adults, the remainder children. The symptoms of the illnesses complained of were lassitude, headache, constant thirst, disagreeable taste in the mouth, loss of appetite, vomiting of green matters, purgings more or less severe, the stools being dark coloured, pain in the stomach and bowels of a crampy character, and in some cases general through the body, coldness of limbs, great exhaustion, and convulsions in one or two instances. Jaundice was well marked in a child who died. At an early stage of the inquiry it was noticed that the patients were not drawn from any particular class of the paupers, and consequently did not usually spend their time in any special set of rooms or part of the workhouse. It very soon became obvious that the different illnesses commenced either during the evenings or in the course of the nights of Wednesdays and Saturdays. When seeking the cause of the mischief, attention was naturally directed to the sanitary state of the institution. Searching inquiries led to the conclusion that this outbreak of disease was not attributable either to bad drainage, unsatisfactory refuse disposal, or contaminated water. Scanning the dietary tables in use, the author found that the food consumed on Saturdays and Wednesdays was not partaken of on other occasions. The meals supplied to the paupers consisted of breakfast, dinner, and supper. The morning repast was similar each day of the week; those classified as able-bodied had bread and gruel; the aged and infirm, bread, tea, and butter; and the children, bread, milk, and oatmeal porridge. For dinner, cooked meat and vegetables were supplied on Sundays, Tuesdays, and Thursdays; soup on Wednesdays and Saturdays; and suet pudding on Mondays and Fridays. For supper the able-bodied received bread and cheese, or bread and broth; the aged, bread, tea, and butter; and the children, bread, milk, and butter or dripping. It was found that all persons affected took soup. Pursuing his investigations in this direction still further, the author learnt that such food was composed of the following ingredients: Raw meat, split peas or Scotch barley, oatmeal, fresh vegetables, bones, meat liquor, dried herbs, and seasoning. The soup was prepared in a copper furnace (which, it was stated, had never been lined with tin), and of course required to be simmered for several hours before it was consumed. On examining this furnace, it was found that it was devoid of its characteristic metallic appearance, and was covered with incrustations to such a degree that scraping with a knife, or even friction with a towel, readily detached the coatings; evidently the utensil had not been thoroughly cleansed for weeks; indeed, it was questionable if it had been properly scoured for a much longer period. The filthy state of this culinary vessel having been established, the wholesomeness of all articles of diet was inquired into, and the conclusion was ultimately arrived at that with the exception of the soup, neither they nor their mode of preparation excited suspicion. The author, after weighing all the evidence obtained, came to the conclusion that the illness he was investigating had been brought about by the soup having been prepared in a foul copper furnace. Unfortunately he was precluded from submitting any of it to analysis, as none was accessible on the day of the inquiry. Neither was a post-mortem examination of the body of the child who died possible, for at the time of his visit it was buried. As soon as it became known that the dirty state of the furnace would be called in question, the blameworthy official promptly took steps to eliminate all trace of his carelessness, and from that hour "the plague ceased"; indeed, there has not been a single fresh case of similar nature in the institution since then, although the sanitary arrangements have until within the last week or two remained absolutely the same. The author admitted that the presence of copper in the soup not having been proved by analysis, the evidence on which he attributed the illness to the use of food cooked in a dirty copper vessel was of a negative character, but trusted that it would be allowed, however, that the events afforded substantial support to the accuracy of his views.

Mr. F. M. CORNER, medical officer of health for Poplar, made some cursory remarks on the Manufacture of White Lead. The author stated that the process of manufacture of white lead appears almost identical in the larger manufactories, and may be briefly given in illustration of the dangers to health under which the *employés* work, in spite of every care on the part of the employers and of well-intentioned regulations made obligatory under the Factories and Workshops Act, 1883. The melted metal is lifted in ladles from a cauldron and run into shallow moulds, setting almost instantly, and is then taken to a chamber to be stacked. The stack is formed first by a layer of tanner's bark, upon which are placed rows of earthen pots filled with vinegar; over these are ranged the moulds of lead, and layer on layer of these three agents are built up until the chamber is nearly filled. Building up the stack is known as "working in the blue bed"; the removal of the stack—generally after three months, when the lead is found largely converted and encrusted with white lead—is termed "working in the white bed." The stack is carefully taken to pieces by the hands of women, water being sprinkled about for the purpose of lessening the rising of the white lead dust. The white lead frames are carried in trays, generally on the heads of the women, to the water tanks, in which they are raked over, and the white lead detached from the unconverted metal.

It is then ground, either in the wet state, during which no dust is generated, or in the dry state, when much dust is diffused. For the purpose of drying, the wet salt is put into ware dishes and placed on shelves in the stove, being submitted to a dry heat at a high temperature. The next step, after about three weeks, is the drawing of the stove. The dishes being handed down from the shelves, and passed from one woman to another, forming a line of workers to the bin, or barrels, into which the contents are turned. It is believed that little or no danger attends the handling of the blue metal or lead, and that the first serious danger is experienced in the removal of the stack, or the white lead, the Act requiring provision of a respirator for the mouth and nostrils to every person so occupied. Unfortunately the work is heavy, heating, and dusty, and scarcely a woman can submit to wear the respirator. It shuts out the air, causes greater heat and fatigue, has to be frequently removed by hands covered with white lead dust to allow of the workers ejecting the saliva impregnated with dust, which otherwise must be swallowed. In practice it is generally seen round the neck, and not on the mouth or nostrils, the women preferring to keep the mouth closed as much as possible, and to spit without hindrance. The same remarks will apply to the work of drawing the stoves and the conveyance and deposit of the dry white lead in the bins and casks. It is a department which entails considerable muscular exertion, and during which the respirator cannot be worn; but the overall and head covering also provided under the Act can be and are used. At the tanks the hands and arms become covered with white lead deposit after drying off of the water. An overall and head cover are required by the Act, and no opinion can be given on the effect to health of the exposure of the hands and arms. The weak points in the present system of manufacturing white lead are, the great amount of manual work, the exposure of the workpeople, nearly all women, to an atmosphere largely charged with white lead dust, and in separating the salt from the lead frames, the exposure of the hands and arms to the same poison whether dry or suspended in water. That white lead can be manufactured otherwise, and in large quantities, is shown by the electric process seen at Professor Gardner's works at Deptford, in which the aim has been to save time, to dispense with manipulation and washing of the white lead, and to save pollution of air by white lead dust. All these points are asserted as having been achieved, but the commercial success has yet to be proved.

In the discussion which followed Mr. Spencer, Mr. Wynter Blyth, Dr. Dixon, and Dr. James Stevenson took.

GLASGOW PATHOLOGICAL AND CLINICAL SOCIETY.

Discussion on the Pathology and Clinical Significance of Albuminuria.

A MEETING of the above Society was held on Tuesday, March 11th, Dr. T. McCall Anderson, President, in the chair.

Dr. MIDDLETON (Glasgow) recorded his experience of the occurrence of albuminuria in the continued fevers, as observed while resident in a fever hospital some years ago. The conclusions he arrived at were that albuminuria occurs in over 85 per cent. of the cases of enteric and typhus; that it occurs early in both fevers, from about the end of the first week onwards, lasting generally till convalescence is thoroughly established; that abundance of albumen indicates a severe case, but severe cases are not necessarily associated with abundance of albumen; that tube casts, hyaline, epithelial, granular, and bloody, are frequently present, and when abundant indicate a severe case, especially in enteric; and that albuminuria is probably more common in the febrile stage of typhus and enteric than in that stage of scarlet fever. —Dr. J. LINDSAY STEVEN (Glasgow) considered such cases of albuminuria very important as throwing light upon the cause of the condition. In such cases increased blood-pressure could play no part, and this fact, along with others, led him to the opinion that albumen appeared in the urine as the result of alteration in the function or structure of the kidney, this alteration being some deterioration of the vitality of the renal vessels, persistent or temporary.—Dr. PERRY (Glasgow) doubted whether we could have such a condition as a healthy or physiological albuminuria; but he agreed with Dr. Finlayson that "albuminuria seems to be oftenest due to the influence of poisons operating on the system," although he was not quite sure that it is ever due "to the presence of grave constitutional disturbance," because in such cases he thought that the poisons had produced grave organic mischief. He regarded the albuminuria produced by specific organisms or poisons in the blood as a perfectly curable disease. He was of opinion that too little importance had been assigned in this discussion to the products of digestion as a fertile source of albuminuria; and too little attention was apt to be bestowed by hospital physicians on the earlier stages of the interstitial and amyloid forms of renal disease.—Prof. CLELAND thought it to be plain that in the secretion of urine there were two processes, one purely mechanical, the other fundamentally vital. There was no evidence that simple squamous epithelium ever took on itself a secreting function, and therefore the anatomical evidence is in favour of the action of the Malpighian corpuscles being an action of pure filtration. In support of this he referred to the solid urine of birds, reptiles, and fishes. He agreed with Dr. Greenfield in saying that the afferent arteries were highly muscular and the efferent "mainly elastic," but he did not understand how it could be doubted that the afferent vessel is larger than the efferent. He thought, however, that Dr. Greenfield himself doubted his anatomical position in objecting to the idea that the circulation in the glomerulus is normally under increased pressure. The energy existing as pressure in the glomerulus became converted into velocity in the narrow efferent vessel. He was inclined to support Dr. Newman's theory that the scanty urine of acute parenchymatous nephritis was due to paralysis of the epithelial corpuscles. Returning to normal function, it was not easy to see what the meaning of the loops of Henle is if there be no function of reabsorption in the previous part of the tubules. — Dr. NEWMAN, in replying, said that in opening the discussion it was not his object to give an extensive or general summary of what was known on the subject of albuminuria, but rather to limit himself to a few points round which the discussion might centre. He then proceeded to criticise some of the remarks made by Dr. Coats and Prof. Greenfield at the meeting of the Society on Feb. 26th, and drew attention to the fact that both of these gentlemen had to some extent misapprehended the theory proposed by him as an explanation of polyuria and albuminuria in Bright's disease. But as Dr. Middleton had already indicated the error into which these gentlemen had fallen, it was not necessary for him to refer to the subject. Dr. Newman then discussed the experiments performed by Bidder and Senator and quoted by Dr. Coats, and expressed as his opinion that though these experiments were extremely interesting, they proved very little, because they were all capable of a double interpretation. His explanation of polyuria and albuminuria in amyloid disease was practically the same as the explanation of these symptoms in chronic interstitial nephritis. In both these diseases there was increased resistance in the true capillary system of the kidney, by reason of which the tension of the blood in the glomeruli was increased; and if we take into consideration the amyloid changes in the Malpighian tuft, it will probably be admitted that a larger quantity of albumen passes through the glomeruli than under normal conditions. From the fact that the epithelium is not involved in the early stages of amyloid disease, it is presumed that it still performs its function by reabsorbing a portion of the albumen which escapes from the glomeruli, and so the quantity of albumen in the urine in the early stages of amyloid disease is small. The polyuria is to be explained in the following way:—The increased glomerulus tension probably leads to the escape of a large quantity of water from the blood, and, as in cases of chronic interstitial nephritis, so also in cases of amyloid disease, we have a new material thrown out which obstructs the lymphatics and separates the bloodvessels from the uriniferous tubules. In the former disease the material is of inflammatory origin, while in the latter it is an infiltration of amyloid matter. In both diseases the endosmosis from the uriniferous tubules to the lymphatic capillaries is interfered with, and polyuria is the result.—The PRESIDENT, in summing up the discussion, directed attention to the extreme diversity in the opinions advanced by the various speakers, and illustrated this by a reference to the discussion on the pathological side of the question. He then referred to the influence of high fever in the production of albuminuria, in which conditions the kidneys partake in the general con-

gestion of the system, and gave it as his opinion that in some at least of the cases of albuminuria occurring in connexion with poisons in the blood, the cause is to be found in the fever produced by the poison rather than its irritating effect upon the kidney itself. He next spoke of albuminuria as a neurotic affection, and of its being probably the cause of the albuminuria met with sometimes in young adults, and he agreed with Dr. Gairdner and others in having grave doubts of the existence of physiological albuminuria. In speaking of exophthalmic goitre, he pointed out that albuminuria and dropsy are not uncommon symptoms, that they are probably dependent upon the same vaso-motor nerve disturbance which produces the other symptoms of that disease, and that while sometimes the albuminuria and dropsy co-exist, either may occur alone. He expressed his admiration for the ingenuity of Professor Hamilton's theory of the cause of high tension, although he could not accept it as a correct interpretation of the phenomena of that condition. Finally, he alluded to the tests for albumen in the urine, and to the very different estimates formed by several of the speakers of the value of the more recent tests. He gave it as his opinion that there is no more beautiful and delicate test than a saturated solution of picric acid, and that it is thoroughly reliable if we take means to eliminate deposits consequent upon the presence of mucin, peptones, and the vegetable alkaloids (especially quinine). He concluded by throwing out the suggestion that it might be a good thing at some future time to have a discussion upon the treatment of albuminuria.

Reviews and Notices of Books.

Manuel des Injections sous-cutanées. Par BOURNEVILLE, Médecin de Bicêtre, et BRICON, Docteur en Médecine. Paris: Libraire du Progrès Médical. 1883.—This is a good practical guide to what is often called hypodermatic medication. The authors commence in the orthodox manner by giving a brief historical sketch of the subject. They assign to Rynd of Dublin the merit of having suggested this mode of administering medicines, but consider that it is to Dr. Alexander Wood of Edinburgh that the credit is due of having introduced the method to general notice. The question of priority of discovery is always warmly disputed. As is commonly the case when any great improvement is made in the arts or sciences, the way is prepared by the investigations of many workers, the so-called inventor simply coördinating the results of his predecessors and adding the experiment or needed acquisition which completes the discovery. In the work before us the drugs are arranged in alphabetical order and the list is a very complete one, hardly anything of importance being omitted. The references are numerous and, in the main, accurate. Under the head of Aconitia three formulæ are given of solutions for hypodermic use. The authors recommend it, on the authority of Gubler, in neuralgia, especially trigeminal neuralgia, and on the authority of Lorent, Oulmont, Massini, and others, in headache, acute and chronic rheumatism, rheumatoid arthritis, angina pectoris, hypertrophy of the heart, and tetanus. At Genova it is frequently employed in small doses in the treatment of acute affections of the respiratory organs. Care, we think, should have been taken to state explicitly what kind of aconitia is intended, as it is a well known fact that the alkaloid as prepared by different manufacturers varies enormously in activity. A good account is given of the use of hydrochlorate of apomorphia as an emetic in cases of poisoning; but although the references to the foreign literature of the subject are very complete, no mention is made of the observations of Gee and others in this country. We notice that aspidospermine, the active principle of quebracho, is recommended in the treatment of shortness of breath, but no special indications for its use are given. Speaking of atropia, the authors refer to the works of Brown-Séquard, Gros, Lazzati, Frankel, Lubanski, Fourcault, Ollivier, Prévost, Scholz, and others, but, curiosity enough, fail to mention Ringer's well-known observations on its use in excessive sweating. Homatropia as a remedy for the night sweating of phthisis is very properly mentioned, although the account of its physiological action is incomplete. Curare is recommended in the treatment of tetanus, epilepsy, hydrophobia, and neuralgia. The subject of ergotine is fully discussed, and attention is called to the fact that the various preparations made by Grandval, Berjot, Wiggers, Tanret, Portans, Yvon, and Wenzel are simply mixtures of the soluble principles of ergot, the name under which they are sold being no guide to their composition. The article on resorcin is an abstract of Callias' essay on the subject; but no warning is given of the frequency with which impure specimens of the drug are met with, or the dangers which may attend their administration. The work, as a whole, is singularly free from mistakes, and it will be found useful both to students and practitioners.

The Vegetable Materia Medica of Western India. By W. DYMOCK, Surgeon-Major Bombay Army, Fellow of the University of Bombay, late Professor of Materia Medica, Grant College, Bombay. Parts I., II., and III. Bombay: Education Society's Press, Byculla. London: Trübner and Co., Ludgate-hill.—The want of a more exact description of Indian drugs than is to be found in any work hitherto published attracted the author's attention. This want had to a small extent been met by the description in the Pharmacographia of some thirty-seven Indian drugs which had been made official in the Pharmacopœia of India, but there still remained undescribed those comprised in the larger secondary list of the official publication, as well as many others in general use among the natives. The author in compiling this work, the greater part of which is before us, has endeavoured (1) to give a short summary of the history and uses of each drug, (2) to describe each article with sufficient minuteness to ensure the detection of adulterations, and (3) to present a condensed account of all that has been published with reference to the chemical composition of the different remedies. These objects have been fairly well performed. The common native names are given at the head of each article, and the Sanscrit, Arabic, and Persian synonyms in the historical summary. Many of the therapeutical agents are familiar enough to English writers, but the large majority are quite unknown in this country. The first article deals with Aconitum ferox, the Bish or Bikh poison from which much of our so-called English aconitia is supposed to be obtained. Bish appears to have been known to the Hindoos from the earliest ages. The Arabian and Persian writers described it as an Indian root, and copied their accounts of it from Hindoo books. It is undoubtedly a most active poison, and possesses properties which should render it a valuable therapeutic agent. Chaulmoogra, or Gynocardia odorata, is now almost as familiar to us in this country as it is to the natives of India. It is largely used as an external application in the form of oil in the treatment of scaly skin diseases, rheumatism, neuralgia, and even phthisis. The great objection to its employment is that it has an odour which is both disagreeable and persistent. A good description is given of the Abrus precatorius, the seeds of which have recently been introduced as a remedy for granular lids. Many of the drugs mentioned in this work will probably in time come into general use. A praiseworthy attempt has been made to refer each plant to its proper natural order, and in most cases the author has succeeded in giving the name of the genus to which it belongs.

The Pathology and Treatment of Venereal Diseases. By FREEMAN J. BUMSTEAD, M.D., LL.D., late Professor of Venereal Diseases at the College of Physicians and Surgeons, New York, and ROBERT W. TAYLOR, A.M., M.D., Professor of Venereal Diseases in the University of Vermont. Fifth Edition, Revised and Rewritten, with Additions by Dr. TAYLOR. Pp. 906. London: Henry Kimpton. 1883.—

The merits of this well-known classical work are too well known to call for more than passing comment. On the death of Dr. Bumstead the task of revision fell upon his former collaborator Dr. Taylor, and worthily has the latter gentleman acquitted himself. In the present edition the subjects of the inoculations of animals with syphilis and the bacillus origin of the disease have been treated for the first time. Two pages of chromo-lithographs are given, delineating the chief venereal lesions. A new drug, Erythroxylon coca, is introduced and highly recommended as an adjuvant in the treatment of syphilis. Dr. Taylor believes that next to mercury and iodide of potassium, it is by far the most potent remedy for the affection. The book closes with an admirably written chapter on Syphilis and Marriage. The type is excellent throughout, and the diagrams are well drawn and in good taste. As in former editions, the discussion of gonorrhœa and its consequences takes up about 350 pages.

Transactions of the Clinical Society. Vol. XVI.—The contents of this valuable volume are of so miscellaneous an order that no natural classification would be at once convenient and complete. There is scarcely a paper in the volume which could be taken away without detracting from the value of the collection. Naturally some essays are of more importance and interest than others. Besides, the interest of a paper depends on the point of view from which it is regarded. Those who have a strong bias for surgical knowledge would place more store by surgical reports and so forth. Some accounts which strike us as of special merit, chiefly because they deal with suggestive and rather rare maladies, are the papers by Dr. Southey and Dr. Barlow on Local Asphyxia, Symmetrical Gangrene, or Raynaud's disease. And, perhaps, we may mention in this connexion Dr. Cavafy's case of Symmetrical Congestive Mottling of the Skin. The surgical treatment of intussusception is illustrated by papers from Messrs. Godlee and Warington Haward, and Dr. Frederick Taylor. A case of tabetic arthropathy, in which the tarsal bones of both feet were involved, is contributed by Mr. Herbert Page. Drs. Dyce Duckworth and Stephen Mackenzie have recorded cases of Subcutaneous Nodules, and Messrs. Nettleship and Higgens a case of Morphœa in the region of the first and second divisions of the fifth nerve, with paralysis of the intraocular branches of the third nerve. Spondylitis deformans is illustrated by cases described by Mr. Clutton and Dr. Lediard. The text is illustrated by nine plates of lithographs and chromolithographs and one woodcut.

How to arrest Infectious Diseases. By EDGAR G. BARNES, M.D. Lond. London: J. and A. Churchill.—Commencing with some description of the terms "contagion," "infection," &c., and impressing on his readers that in rooms and other places where infectious diseases are under treatment all dust and dirt should be regarded as infectious, the author, who has the advantage of being a medical officer of health, next advises as to the precautions to be taken during the prevalence of such diseases, some details being given as to the special steps which are desirable as regards each of the several fevers. Then follow hints as to what constitutes disinfection, distinction being drawn between that process and mere applications which act as antiseptics and deodorants. The value of dry heat is explained, as also that of the various gases, such as sulphurous and chlorine gas, and of a number of chemical substances in common use, the methods to be employed in their application being explained. Disinfection by steam under pressure, though so powerful an agent for the destruction of contagion, is not adverted to, perhaps because of the expense of carrying it out efficiently. The legislative enactments and the Government memoranda bearing on the subject are discussed at the end of the small volume, which affords in a limited compass a large amount of information, so put together as to be readily available for all ordinary purposes.

Sanitary Law. A Digest of the Sanitary Acts of England and Scotland. By H. AUBREY HUSBAND, M.B., C.M., B.Sc. in Public Health, Edin. Edinburgh: E. and S. Livingstone. — We ought to have noticed this very useful little book earlier. It contains the substance of lectures on sanitary law delivered in the extra-mural medical school of Edinburgh. In these days of sanitation, a medical man cannot afford to be ignorant of the main points in sanitary law and sanitary organisation. In a political respect the functions of the Local Government Board are enormous and important. It follows that such a handy little book as this, giving the outline of all the principal Health Acts, with an introduction, is likely to be very useful to medical officers of health and members of the profession generally, as well as to others. There is room for a good index, and some other points of improvement of arrangement. But the work represents a great deal of labour, and will save time and trouble to those who are too deeply engaged in practice to analyse and master Acts of Parliament, however important.

The Diagnosis of Diseases of the Spinal Cord. By W. R. GOWERS, M.D., F.R.C.P. London: J. and A. Churchill. 1884. —This is the third edition of this valuable work. We have no hesitation in saying that the student who desires to pass by easy and natural gradations from his physiological to his pathological knowledge of the functions of the spinal cord, cannot do better than make Dr. Gowers' little book the subject of his closest attention. And if the student or busy practitioner will take the pains to master its contents, we feel sure that but little difficulty will be met in diagnosing the majority of cases of disease of the spinal cord which may come under his notice. The first edition has been translated into French and the second into Russian. The third edition has been carefully revised, additions have been made in many places, and a section has been added on the diagnosis of "functional" from organic disease, which certainly is not one of the least important chapters in the book.

Reports of the Medical, Surgical, and Pathological Registrars of the Middlesex Hospital. London: John Smith and Co. — This volume deals with the cases which were treated in the hospital during the year 1881. The report of the medical registrar, Dr. Browne, includes tables showing the main points of interest in the cases of enteric fever, chorea, pernicious anæmia, diphtheria, empyema, and malignant growths. The report of the surgical registrar, Dr. Sydney Phillips, is also furnished with tabular accounts of the cases of cancer, and other malignant growths, cases of erysipelas, infectious diseases, hernia, and compound fracture. Dr. Kingston Fowler is the author of the report from the post-mortem table. All that need be said of these reports is that they give evidence of careful observation and intelligent industry.

Our Schools and Colleges. Vol. I., Boys; Vol. II., Girls. By F. S. D. DE CARTERET-BISSON. London: Simpkin, Marshall, and Co.—In these volumes the author gives a complete compendium of practical information upon all subjects connected with education and examination recognised in the United Kingdom at the present day. As a proof that parents have appreciated the information contained in Vol. I., it may be mentioned that seven editions have been disposed of; and its comprehensiveness may be judged by the fact that it now contains nearly 1300 pages of closely printed matter. Information is given respecting the Civil Service and all professional examinations, and some very useful hints on the education of the young are embodied in the work. We confidently expect that Vol. II. will be found as useful to those who have the care of girls as Vol. I. has been found by those concerned with boys. As far as we can judge, the errors are exceedingly few, and comparatively unimportant. In the

account of the Durham University College of Physical Science, Mr. Freire-Marreco is given as the Professor of Chemistry. Mr. Marreco has, however, been dead some years. Again, on page 1121 Bramham College, Tadcaster, is mentioned as being conducted by Messrs. Haigh. The partnership was dissolved some years since, and we believe that the college was finally closed as an educational centre about a year ago. These errors can be easily remedied in the next edition, which, we feel sure, will soon be demanded.

The Journal of Anatomy and Physiology. Conducted by Professors HUMPHRY, TURNER, and MCKENDRICK. Vol. XVIII. Part II. January, 1884. London: Macmillan and Co.—This part contains the following memoirs:—1. Certain Abnormal Conditions of the Reproductive Organs in the Frog, by E. A. Milnes Marshall. 2. The Urea Elimination under the use of Potassium Fluoride in Health, by L. A. Waddell. 3. Primary Sarcoma of the Kidney, by Bertram Windle. 4. The Transverse Measurements of Human Ribs, by R. J. Anderson. 5. A Method of determining the Fissure of Rolando and some other Cerebral Fissures in the Living Subject, by Arthur Hare. 6. New Forms of Nerve Terminations in Mammalian Skin, by George Hoggan. 7. The Fold of the Nates, by J. Symington. 8. Researches into the Histology of the Central Grey Substance of the Spinal Cord and Medulla Oblongata, by Ainslie Hollis. 9. The Musculus Sternalis, by D. J. Cunningham. 10. Movements of the Shoulder-girdle involved in those of the Arm on the Trunk, by Charles W. Cathcart. 11. The Relation of the Orbito-sphenoid to the region Pterion in the Side Wall of the Skull, by J. B. Sutton. The journal also contains Anatomical Notes.

ROYAL COLLEGE OF PHYSICIANS.

THE proceedings of the Comitia of the Royal College of Physicians, held on Monday, April 7th, were of considerable interest. At the opening the President proposed that addresses of condolence on the death of the Duke of Albany should be presented by the College to Her Majesty the Queen and to the Duchess. Sir William Jenner, in an eloquent address, spoke in feeling terms of the deep bereavement that had fallen on the Queen and on the widow of the illustrious Prince, and on the close connexion that an almost life-long illness had necessarily wrought between him and the profession. The Duke of Albany had always interested himself in the College of Physicians, and on the last two occasions of their annual conversaziones had been present for a considerable time. The Duke had also established most affectionate relations with the profession, and in the course of years many of its members had been called upon to attend him professionally, and Sir William Jenner especially alluded to the fact that the Prince throughout the course of a life of prolonged ill-health remained thoroughly loyal to his attendants, and never encouraged the hints and suggestions that might have led him to try some vaunted remedies or place reliance on any system of quackery. Sir William Jenner's remarks were listened to with profound sympathy and respect, and the addresses were voted unanimously. The Fellows then proceeded to discuss various matters, accepting the amended report of the Pharmaceutical Committee, and deferring the report from the Medical Bill Committee for further consideration. It was then proposed that in future there should be four examiners on the subject of Hygiene, and two examiners for the Murchison Scholarship, which was adopted. It was next proposed that in future two vice-presidents should be elected annually, whose duties it should be to assist the President. At present, although means exist for the nomination of a *vicarius* in case of the President's absence, the burden of securing his attendance rests on the President. By the proposed arrangement, however, on merely giving due notice, the President will now always secure the attendance of a substitute without incurring obligations. This step was called for owing to the great increase in the business of the College and the numerous committee meetings that are now held. The proposal was adopted, and a committee appointed to define the duties and other particulars of the office.

The President then delivered his annual address, touching upon the incidents of the past year. The chief matter of interest for the profession at large was the statement that the result of the interview of the Presidents of the Royal Colleges of Physicians and Surgeons with the Home Secretary with regard to the Bower and Keates case was that in future no prosecution in which any member of the profession is concerned will be undertaken by the public prosecutor without the facts having been previously submitted to some medical man of eminence for consideration. The address concluded with an obituary notice of the Fellows deceased during the past year, the speaker gracefully dwelling on their respective merits and claims on the regard of the profession in terms of sustained and powerful oratory. The meeting terminated by the unanimous re-election of Sir William Jenner as President for the ensuing year.

THE OXFORD AND CAMBRIDGE BOAT RACE.

IT will be interesting to compare the effects of training upon the two University crews, as we did after the race of last year (vide THE LANCET for March 24th, 1883).

OXFORD.

No.	Weight on March 24th.	Weight on March 31st.	Weight on April 5th.	Increase in last week.	Decrease in last week.
	st. lb.	st. lb.	st. lb.	lb.	lb.
1	10 12	11 2½	11 2	—	0½
2	11 0	10 12	11 0	2	—
3	12 7	12 9	12 10	1	—
4	12 13	13 0	13 1	1	—
5	12 12	13 0	12 11½	—	2½
6	13 4	13 5	13 4	—	1
7	10 12	10 11	10 13	2	—
Stroke	10 2	10 3	10 4	1	—
Total . .	94 6	95 0½	95 3½	7	4

CAMBRIDGE.

No.	Weight on March 24th.	Weight on March 31st.	Weight on April 5th.	Increase in last week.	Decrease in last week.
	st. lb.	st. lb.	st. lb.	lb.	lb.
1	10 6	10 5½	10 6	0½	—
2	11 2½	11 1	11 3½	2½	—
3	12 1	11 13	12 2	3	—
4	13 3	13 2½	13 3	0½	—
5	13 2	13 1½	13 2½	0½	—
6	11 10	11 7½	11 6	—	0½
7	11 13	11 0	11 13½	3½	—
Stroke	11 11	11 11	11 11½	0½	—
Total . .	95 5½	94 9½	95 6	11½	0½

In the first week of training it will be observed that Oxford gained 7½ lb. in weight, while Cambridge lost 10½ lb. In the last week, however, the Cambridge crew more than recovered the weight which they had lost, and two days before the race they were 2½ lb. heavier than their antagonists, notwithstanding that a week previously they had been 5½ lb. lighter. It will be seen that during the last week three of the Oxford crew trained *down* to the extent collectively of 4 lb., and that one (No. 5) lost the rather serious amount of 2½ lb. Five of the Oxford men trained *up* to the extent (collectively) of 7 lb. In the Cambridge crew only one man trained *down*, and only to the extent of ½ lb., while the remaining seven trained *up* to the extent collectively of 11½ lb. Cambridge won by three lengths.

THE "CEYLON."—The Ocean Steam Yachting Company's Steam Yacht "Ceylon" arrived on Monday off Piræus being on her second cruise in the Mediterranean. She is expected to return to England about May 20th, preparatory to a new trip to the Azores and Madeira.

THE LANCET.

LONDON: SATURDAY, APRIL 12, 1884.

THE passage of the Medical Bill through the House of Lords nearly a month earlier than last year, and all the circumstances of its discussion there, give to the measure an importance which it is needless to insist on. The Government is earnestly determined to end this question; so is the Opposition, as represented by no less an authority than the Duke of RICHMOND, Chancellor of the University of Aberdeen; and so is Lord CAMPERDOWN, who, as chairman of the Royal Commission which investigated the existing system of half-diplomas and competing authorities, may be presumed to know something on the subject. Men viewing the matter from such different points of view as Dr. ACLAND (the chairman of the Medical Council), Mr. MARSHALL (the president of the Royal College of Surgeons of England), Mr. MACNAMARA (the representative of the Royal College of Surgeons in Ireland), and Dr. HAUGHTON (the representative of the University of Dublin), desire, with some qualifications, to see the Bill passed. The profession has again, for the third or fourth time, on this occasion through the British Medical Association, earnestly petitioned for legislation on the lines of the Bill.

Opposition to such a Bill, after ten or fifteen years of discussion, would be an attitude that would involve extreme responsibility on the part of any body or persons concerned. Unless objections very different from those raised in the House of Lords—different both in principle and in magnitude—can be urged in the House of Commons, it may be confidently expected that the Bill will be allowed to pass with but little modification. One alteration which certainly ought to be made is the insertion of the titles clauses—clauses giving to a person who passes the final examination a title expressive of his complete qualification—i.e., his qualification in medicine, surgery, and midwifery. For the very essence of the measure is to abolish partial qualifications, and to make it impossible for a man who has paid perhaps a large sum for a qualification on a very early day to find that he is unqualified as respects five-sixths of his cases.

But we are not now concerned about any such obvious amendments. We are chiefly solicitous as regards the grace with which the various bodies concerned should accept legislation intended to increase the respect with which authorities in one part of the United Kingdom should regard those in other parts. All the bodies in the whole kingdom are interested in the creation of tribunals of examination so constituted as to be above suspicion. If there are any that may be said to be more interested than others in the creation of such tribunals, they are the Scotch universities. These have much to gain and nothing to lose by legislation. Their graduates at present generally take the qualification of one or other of the medical corporations. Under the Bill they will be exempted from all the examinations created by it except the final one, and for this they will be charged only such a fee as will cover the bare expenses of the examination. Lord BALFOUR in the House of Lords, and Professor STRUTHERS in the Medical Council, spoke as if the universities objected to this provision. No doubt they would prefer the alternative of assessors in their examinations, but this alternative was objected to by the Royal Commission, and is not offered by the Government.

For several reasons we refuse to believe that the Scotch universities, which have been very respectfully treated in this measure, will embarrass the Government by such objections as Lord BALFOUR expressed. The first of these reasons is that the universities of Scotland have no more right to expect their graduates to be exempted from an examination established for good State reasons than have the other universities, which cheerfully submit to the terms of the Bill. The second reason is that, in the opinion of many Scotch graduates, it is not desirable, in the interest of their universities, that they should claim any exemption from the test of the final examination. To do so would always be liable to be construed as an act of fear, and a misgiving whether the university test or that of the State were the higher. Professor STRUTHERS is perfectly satisfied in his own mind that nothing can be better than the Scotch examinations. The desideratum is to bring other judges to the same opinion. Sir ANDREW CLARK and Dr. DUCKWORTH may be considered no bad specimens of Scotch graduates, and they have no desire to excuse the graduates of the Scotch universities from the slight demands of the Bill. There is yet a third reason why we refuse to believe that the Scotch universities will obstruct the progress of the Bill by demanding that their graduates, unlike all other British graduates, shall not pass the final examination of the Divisional Board: it is this—that they have already long since abandoned this demand and acquiesced in the proposals of the Government. This point was settled last year, and the universities accepted the Bill—as well they might, seeing how much there was in it to place them in a right position as the leading medical educational bodies of Scotland. It is surely not conceivable that they will now change their attitude. We do not believe that they will prove so inconsistent. Let it be remembered that this is far more an English than a Scotch question; that the Scotch schools thrive by teaching and qualifying English medical students; and that they have nothing to lose by their work being subjected to public tests.

The other questions which might occasion discussion are very subordinate, though fair matters for adjustment: such as that raised by Mr. MACNAMARA as to the distribution of surplus moneys; and, in Scotland, the proportional representation in the Divisional Board of Edinburgh and the other authorities. There is great credit to be gained now by helping the Government to pass the Bill. Only absolute discredit can accrue by magnifying minor local questions. Any attempt to do so would justify very strong denunciation by the Government, would be treated with little patience by the House of Commons, and would be likely to lead to a much more radical measure than the present.

DR. CLIFFORD ALLBUTT'S Gulstonian Lectures on "Neuroses of the Viscera" should mark the commencement of a new epoch in the history of Medicine, both as a science

and as an art, in relation to large classes of maladies which have hitherto been misunderstood, and consequently maltreated. This may seem a somewhat broad assertion to make; but we believe those of our readers who have given these lectures the attention they deserve will not think we have over-stated the case. We can readily understand that enthusiasts of the pathological school, who can discover little of value outside the dead-house, and are apt to view every disease from the morbid anatomy standpoint, will not recognise any exceptional merit in Dr. CLIFFORD ALLBUTT's disquisitions. The rigidly conventional clinician, too, may fail—more particularly if he be a specialist—to perceive the extreme value of the common-sense views the lecturer has set forth with so much commendable simplicity; but the *practitioner*, whose sole aim it is to obtain a key to the mysteries of obscure disease, and to find a way of curing it, will, unless we are greatly mistaken, hail these discourses as of more than ephemeral interest.

What Dr. CLIFFORD ALLBUTT has undertaken to teach—and taught so ably—is indeed no new truth, but it is one which has not, so far as we are aware, been previously placed with equal perspicuity before the profession. For the first time a formal and broad affirmation has been made setting forth the important fact that by far the largest and most intractable classes of common maladies for which the aid of the medical practitioner is sought are of nerve origin; and if anything more than neurotic disorder occurs in their development, it is the effect, and not the cause, of the trouble which the physician is called upon to treat. Only those who have carefully read these lectures, and studied the numerous cases cited therein, can form an adequate notion of the area of clinical work covered by the self-evident inferences which the practitioner must perforce draw from the premisses laid down. Something like a panic might be expected to occur among the gynæcologists, but that we know how persistent are the opinions of those who are persuaded against their will. It is, however, hardly possible that there should not be some sort of rejoinder to such spirited though friendly pronouncements as the following: "Now, gentlemen, it is time we complete our reaction from this gynæcological tyranny, and that we of this College no longer permit ourselves to be snubbed by these brethren of ours, who calmly tell us, with their superior airs, that our use of such expressions as uterine neuralgia, irritable uterus, ovarian neuralgia, neurasthenia, and the like, comes of a shallow sciolism, and is grounded upon the emptiness of our knowledge of uterine diagnosis. The spirit of meekness alone restrains me from throwing the same stone again, and accusing our gynæcological friends of ignorance of neuropathies and of the neurotic diathesis."

In proof of his position the lecturer has adduced concise but clear notes of a sufficient number of cases, in which "affections" of the uterine organs long under "local treatment," and unrelieved, have been promptly remedied as soon as they have been recognised in their true character as maladies dependent on neuroses. It is not, however, solely, or even particularly, against the specialism of the gynæcologists the argument of these lectures is directed. It is shown with equal force and clearness that the great majority of visceral disorders and disturbances, whether of the circulatory, the respiratory, the digestive, the assimilating, or the excretory organs, are essentially neurotic. This is a great truth, which is, happily, beginning to dawn on the profession at large, and which cannot but prove to be little short of revolutionary in its influence on practice. We are justified in calling it a great truth, for it is, in fact, the application of that universal law of nature with which the name of DARWIN is indissolubly associated—the Law of Development—to the diagnosis of disease. Function *always* precedes organism in the order of development, and it follows as a necessity that derangements of function must precede abnormalities of structure, if not in the individual manifestations, in the generic growths of disease. And if this be so, the innervation must be at fault before the organ fails. The soundly practical view Dr. CLIFFORD ALLBUTT has propounded to so much purpose in these lectures, and which must, we are persuaded, on consideration elicit the approval of every *general* practitioner in the country, is that the art of healing should aim at grappling with the neurosis first, whatever it may do with the organic state or local changes induced by the nerve-distribution afterwards. In short, local trophic changes, perverted secretions, and structural abnormalities are the effects or "symptoms," not the causes, of the disease, which disease is the neurosis.

The strongest part of the work done by Dr. CLIFFORD ALLBUTT is perhaps that which relates to the elucidation of gastric disturbances. It is in dealing with the group of maladies connected with or dependent upon what is so stupidly called "indigestion" or "dyspepsia" that the clinical tact and experience of the physician come prominently to the front; and in this department of work he has beyond question a wide field, not at the moment too well or wisely cultivated. It is impossible not to feel that Dr. CLIFFORD ALLBUTT has reason when he contends that it would be as rational to group all the disabilities for muscular exercise such as walking—from locomotor ataxia to a sprained ankle—under the term dyskinesis, as to class the divers forms and effects of bad stomach-work under the meaningless word "dyspepsia." Therew ill be many criticisms of, and probably not a little cavilling at, Dr. CLIFFORD ALLBUTT'S strictures on the subject of visceral neuroses, but the prominence he has given to one of the most interesting and, as we believe, pressing questions in practical medicine cannot fail to advantage both the profession and the public.

THE letter written by Mr. CHARLES HAWKINS, and published in another column of this week's issue, over and above suggesting several important and imperative reforms in the Royal College of Surgeons of England, gives emphasis to the general expression of dissatisfaction and disappointment with the recent meeting of Fellows and Members. Not one of the three sections of which the total assemblage was composed can look back upon the deliberations of that meeting with any degree of gratification. At first many members of the Council grudgingly adopted the proposal to convene the meeting, and throughout manifested a spirit of jealous distrust. This spirit, though for the most part carefully concealed, every now and then found vent in some of the President's utterances and comments. The Fellows, on the other hand, while engaging in front, were surprised by an unexpected onslaught from the rear. In seeking to obtain concessions

from the Council, they had to encounter the hampering aid of the Members. Whatever the Fellows asked the Members demanded, from the election of the President down to the determining of the regulations relating to admission to the Fellowship. We do not undertake to decide whether the Members were right in this or wrong; we merely note the fact as an element of discord and possible failure. There was no common central idea binding together the various sections; hence harmony and unanimity were impossible. It was a mutual struggle of Might against Right. The watchword was,

> "That they shall take who have the power,
> And they shall keep who can."

With such principles of action the result could not be other than humiliating and disappointing. The Council, either wilfully or in ignorance of what is needed, was unwilling to yield more than the smallest amount consistent with the semblance of concession, while some of the Members seemed incapable of discriminating between claims reasonable and just and claims that were both unreasonable and unjust. With but few exceptions, those who took a prominent part in the business of the meeting were unable to look beyond the small and narrow issue that concerned themselves.

Though disappointing, the outcome of the meeting need not be discouraging. Prudent reflection and conscientious self-searchings may disclose the causes of failure and reveal the conditions of success. Whatever will facilitate these ends should be encouraged. If the separate activities of the Association of Fellows and the proposed Association of Members be required, then let these activities have free play. But neither the deliberations of associations nor the efforts of individuals will accomplish any useful purpose unless they are each and all directed to the common end of promoting the interests, dignity, and general welfare of the whole of the medical profession. So far as the Royal College of Surgeons is directly concerned, the task is to bring the interests of the corporation into complete and perfect harmony with the interests of the profession. At present these interests are too often in antagonism. How is the reconciliation to be effected?

Mr. HAWKINS proposes a solution of some of the difficulties which every reformer must face. The suggestions which this gentleman offers have a peculiar value and significance, inasmuch as they come from one who is not only skilled in public affairs, but specially versed in the proper concernments of the College. Valued and significant, however, though they be, Mr. HAWKINS' observations and suggestions relate almost exclusively to the domestic management of the College, to questions of finance, to the mode of election and tenure of office of the President, to the forfeits incurred by unpunctual Members of the Council. These matters are doubtless of considerable importance, and most of them may be cordially approved; but their importance is only relative; they leave untouched the real malady which threatens the usefulness and permanence of the College. Refurnishing will avail little to save a house the foundations of which are falling away. Though nominally only eighty-four years of age, the Royal College of Surgeons of England is really antiquated. Though its first Charter was granted in the year 1800, it did in reality inherit the constitution of the old Corporation of Surgeons which preceded it. During the eighty-four years that have elapsed since the Royal College of Surgeons of England was established, a new era has dawned, but the College remains the same, and remaining the same it has been left behind. Renewal and reconstruction are both needed to adapt the College to the requirements of the times and to save it from ultimate disintegration; otherwise complacent shrugging of shoulders will not put off the evil day, nor will slavish adhesion to obsolete traditions. We repeat, if the Council of the College is really wishful to secure the confidence of its Fellows and Members, and advance the welfare of the corporation, it should solicit the opinions of the more intelligent and distinguished *alumni* of the College, be they Fellows or Members.

PUERPERAL FEVER is a subject which has at all times received a great deal of attention; this has arisen partly from the peculiar condition of the subjects of its attack, partly from its fatal character, and partly from the obscurity of its etiology—all of which have contributed to the dread in which it has been justly held by practitioners in midwifery. The germ theory of disease has only given a new impulse to the study of this subject, and since the septic theory of its nature has been generally accepted, and the scientific use of antiseptic remedies has become better known, new methods for the prevention and treatment of child-bed fever have been introduced into practice.

The subject has been recently discussed by the Academy of Medicine of New York. It was opened in a long and able paper by Dr. GAILLARD THOMAS, who took the septic view of the disease, and recommended recourse to antiseptic remedies for prophylaxis and treatment. He was followed by Dr. FORDYCE BARKER, who with remarkable ability and moderation upheld the opposite view. These two views are tolerably well known. One regards all inflammatory lesions occurring after labour—be they metritis, phlebitis, cellulitis, peritonitis, or lymphangitis—as the result of septic infection, of the absorption of some poison into the blood of the parturient woman through some solution of continuity in the parturient canal. Dr. BARKER, on the other hand, maintains that the majority of these inflammations are not septic, but the result of injury; that there is also septicæmia after labour; that there is, in addition to these, a puerperal fever proper, a specific fever; and that when septicæmia occurs in the course of this fever it occurs as a secondary disease. There is much to be said in favour of both of these views, but the truth of neither of them has as yet been demonstrated. That inflammatory lesions occur after labour, depending upon injury to the maternal tissues, there can be no question; that like lesions occur as the result of septic infection is universally recognised; that there is a specific fever affecting parturient women only, and arising from a specific poison, is admitted by only a few physicians. The treatment adopted for the disease will depend much upon the view taken of its nature. If it be regarded as septic in all cases, then antiseptic remedies should be had recourse to generally; if, on the other hand, certain cases possess a specific character, the local application of antiseptics will prove of little use; and if a large number of the inflammatory lesions be the result of direct injury, without septic infection, antiseptic remedies will be powerless to prevent them.

Dr. THOMAS appears to regard all puerperal fever as septic

in its origin, and has propounded a series of rules for the prevention and treatment of the disease based upon this view. Some of these rules we cordially approve, while the carrying out of others would render midwifery practice impossible. Among the "prophylactic measures which should be adopted in all midwifery cases whether they occur in hospital or private practice" (according to Dr. THOMAS) we find the following. "The room in which the confinement is to take place should have the floor, walls, and furniture thoroughly washed with a ten per cent. solution of carbolic acid or mercuric bichloride, 1 in 1000, and the bedstead and mattress should be sponged with the same solution." Ergot should be administered three times a day for at least a week after delivery. "If the perineum be lacerated, it should be closed at once by suture, to shut up this avenue to septic absorption; and should slight solutions of continuity be found in the labia or the vulvar extremity of the vagina, these should be dried by pressure of a linen cloth, touched with equal parts of solution of persulphate of zinc and carbolic acid, again dried thoroughly by pressure with the cloth, and then painted over with gutta-percha collodion." Vaginal injections should be made, and iodoform pessaries introduced every eight hours in cases of normal labour; in cases of difficult or instrumental labour twice as often; this should be kept up for ten days. When puerperal fever has set in, Dr. THOMAS recommends intra-uterine injections to be used every five or three hours or every hour, according to the severity of the case, together with the reduction of the temperature of the patient by the application of cold; during the latter part of the treatment chills are to be warded off by the administration of quinine and WARBURG'S tincture. How is it possible for labour to be conducted under such elaborate and meddling rules—rules which we cannot help regarding as likely to be productive of very grave and serious mischief? That there may be circumstances in which it would be desirable, nay, wise and necessary to have recourse to many of the prophylactic measures recommended by Dr. THOMAS we do not deny, but such circumstances are of the greatest rarity. Nor can we regard the treatment of puerperal fever recommended by him with greater favour. Of the high value of vaginal and uterine injections in proper and suitable cases we have no doubt; but we do not think cases of normal labour suitable for the use of vaginal injections and iodoform pessaries every eight hours; nor can we regard the repetition of intra-uterine injections every hour, or every three or five hours, as likely to be productive of benefit. On the contrary, we think injections used in such a manner are by no means unlikely to be productive of very serious consequences, be they a solution of carbolic acid or of mercuric bichloride.

It is somewhat strange that Dr. THOMAS should have been so neglectful of the literature of the subject as to overlook the use of antiseptic vaginal injections by Dr. BARKER, an account of which was published in his work on puerperal diseases. Dr. LUSK appears to have indicated the position occupied by the scientific physician with regard to the whole question. He pointed out the difference between putrid intoxication and septicæmia proper, the futility, as shown by experience, of washing furniture, walls, and floors, with carbolic acid, the dangers of intra-uterine injections, and the circumstances which call for their use. Dr. THOMAS, at the close of the discussion, confessed to a change of feeling with regard to vaginal injections, and we feel confident that, were he to free himself from preconceived theories, and have regard only to real experience of this important subject as embodied in the results obtained in lying-in hospitals and elsewhere, he would discard those measures also which appear so adapted for the occasion, but which have really been proved not only futile, but fraught with danger.

A VERY important step has been taken by the Corporation of London, with the concurrence and sanction of the Local Government Board, in connexion with the notification of infectious diseases for the purposes of securing the isolation of patients in so far as the Port Sanitary District is concerned. Both under the Sanitary Act of 1866, which is in force in the metropolis, and under the Public Health Act of 1875, which is presumably in operation in the extra-metropolitan portions of the port of London, it is enacted that, subject to the approval of the central authority, regulations may be made by any local authority for removing to any hospital to which such authority are entitled to remove patients, and for keeping in such hospitals as long as may be necessary, any persons brought within their district by any ship or boat who are suffering from a dangerous infectious disorder, and such regulations may impose on offenders against the same reasonable penalties.

So far as we know, the Port Sanitary Authority of London is the first authority who have made regulations in accordance with this provision, and we believe they have been induced to do so on account of the extreme difficulties they have met with in securing the isolation of certain patients who, in the interests of the public health, ought to have been at once placed in hospital. The circumstances of residence on board ship are totally different from those of persons dwelling on land. In the one case, if infectious disease is heard of, the patient is confined to his house, and there he can probably be found even after an interval of several days; in the other case, a person may be reported ill in a ship, and when he is sought out, it is found that the vessel has passed on, has gone into dock, and that the patient has been removed no one knows whither. Hence it is that from the present time every master of a vessel arriving in the port of London will be required, within two hours of the ship calling at or being moored off Gravesend, or at other stated times under certain specified circumstances, to take all such steps as may be requisite for the removal of any person on board who may be suffering from diphtheria, erysipelas, measles, scarlatina, small-pox, enteric fever, or typhus fever, to one or other of the hospitals of the port authority. The master is further required to cause the person so affected to be removed according to the directions of the medical officer of health; and any failure to perform either of these duties is punishable by a fine not exceeding £5.

The principal object which it has been sought to attain has been the isolation of the infectious sick arriving in London by sea, but indirectly it will afford to the Port Authority notification as to the existence of cases of infectious disease within their district; and, having regard to the

special facilities which exist in ports for the dissemination of infection under circumstances which could not otherwise be controlled, it seems evident that it has been the intention of the Legislature ever since 1866 that port and other authorities into whose districts persons can be brought by "any ship or boat" should be capable of possessing this information. If the experiment succeeds in the port of London, other port and riparian authorities will doubtless seek to make similar regulations; but any other authorities desiring to imitate the London authority should remember that the latter have not put such regulations into force until they have first provided themselves with every proper means, by way of suitable hospital buildings and otherwise, to carry them into effect in the best possible way, both as regards the patients and the public.

Annotations.

"Ne quid nimis."

THE EARLY DAYS OF ST. THOMAS'S HOSPITAL.

FROM a pamphlet reprinted from the Transactions of the Royal Society of Literature we gather some very interesting, and we fancy not widely known, facts concerning the early history of one of our oldest hospitals. The author, Mr. W. Rendle, F.R.C.S. (Medical Secretary of St. Thomas's Hospital), states that the material of his paper is "chiefly from a manuscript book in the library of the Earl of Ashburnham, now in the British Museum." This book, though otherwise entitled, "really concerns the foundation of St. Thomas's Hospital early in the thirteenth century by Bishop Peter de Rupibus, its reconstruction in 1507, and a detailed account of property left for its use." The nucleus of the hospital seems to have arisen in the Priory of St. Mary Overy, but at what time is not very evident. Early in the thirteenth century, apparently about 1207, a great fire which raged in Southwark destroyed the priory and hospital. The prior and convent speedily erected a temporary hospital near to the old site, but it was not till 1228 that Peter de Rupibus, Bishop of Winchester, built a "nobler hospital" on the opposite side of the highway. It is clear that even so long back as 1228, when this new departure occurred, the institution was by no means in its infancy, for the following words occur in the bishop's appeal or charter of indulgence granting remission of twenty days' penance to those of "my dearest sons" who bestowed alms upon the hospital:—"Behold at Southwark an ancient hospital built of old to entertain the poor has been entirely reduced to cinders and ashes by a lamentable fire." About this time the hospital, having been separated from the priory, was made independent of it. Viewed by the light of these nineteenth century days, the means taken to suppress vice and maintain discipline seem somewhat severe:—"In the time of Elizabeth the governors of St. Thomas's had a whipping-post and stocks within the precincts, and used them freely. Under some conditions food was curtailed; in cases of disease from vice, after cure and before discharge, a whipping was administered, which was extended even to Sisters guilty of offences within the hospital, and was given 'with a will' sometimes. One, I nôte, an offending Sister being ordered 'twelve stripes, to be well laid on.'" In the MS. occurs in connexion with St. Thomas's Hospital an interesting name, that of Sir John Fastolfe. We are also told that at one time there existed within the precincts of St. Thomas's Hospital (as at other religious houses) a renowned printing-press, from which was issued in 1537 "the Bible known as 'Nycolson's Coverdale,' the rarest of English Bibles, and the first one complete in English printed in England." Mr. Rendle's interesting pamphlet carries us down to 1553. We trust he will afford us further information of the life-history of the hospital.

INTERNATIONAL HEALTH EXHIBITION.

THE shadows cast before the coming Exhibition are numerous, long, and, in a measure, curious. The literary portion of the exhibition seems to have been especially well provided for. If the amount of letterpress which is to be devoted to the Exhibition is any guide to the degree of success which is to be obtained, there will be no lack of that quality. We have received a printed list setting forth the information that twenty-eight handbooks are in course of being written. Each of the titles is instructive. Dr. Acland leads the way with an illustrated book on Healthy Villages. Mrs. Gladstone follows with one on Healthy Bedrooms and Nurseries, including the Lying-in Room. Healthy and Unhealthy Houses in Town and Country is the title of an illustrated volume by Mr. W. Eassie, with an appendix by Mr. Rogers Field. Another illustrated production will be known as Healthy Furniture and Decoration, by Mr. Edis, F.S.A. Mr. Charles Paget will write on Healthy Schools; and Mr. Lakeman on Health in Workshops. Captain Douglas Galton is to be the author of a Manual of Heating, Lighting, and Ventilation; Food will be treated by Mr. Blyth; Cookery, by Mr. Berdmore; Food and Cookery for Infants and Invalids, by Miss Wood, with a preface by Dr. Cheadle; Alcoholic Drinks, by Dr. Thudichum; Drinks, Non-Alcoholic and Aerated, by Dr. John Attfield; Fruits of all Countries, by Mr. Thiselton Dyer; Condiments, including Salt, by the Rev. J. J. Manley; Legal Obligations in respect to Dwellings of the Poor, by Mr. Harry Duff, with a preface by Mr. Arthur Cohen; Moral Obligations of the Householder, including the sanitary care of his house, by Dr. G. Vivian Poore; Laboratory Guide to Public Health Investigation, by Mr. Watson Cheyne and Dr. Corfield; Physiology of Digestion and the Digestive Organs, by Professor Arthur Gamgee; Fermentation, by Dr. Duclaux, with a preface by M. Louis Pasteur; Spread of Infection, by Mr. Shirley Murphy; Fires and Fire Brigades, by Captain Shaw; Scavenging and other such Work in Large Cities, by Mr. Booth Scott; Athletics, Part I., by the Rev. E. Warre; Athletics, Part II., by the Hon. E. Lyttleton and Mr. Gerard Cobb; Dress in relation to Health and Climate, by Mr. E. W. Godwin; the Ambulance, by Surgeon-Major Evatt; the Influence of Schools of Art on Manufacturing Industry, by Mr. John Sparkes; and the Homes of the Poor, by an author not yet named.

MORTALITY IN THE MERCHANT SERVICE.

THE rate of mortality in the British Mercantile Marine is a subject which has especial interest at the present time. Attention has been called to the unsatisfactory nature of the materials which now exist for the calculation of such a death-rate. The Parliamentary Return annually furnished by the Registrar General of Shipping and Seamen is made up from a return of "accounts of wages and effects of seamen (exclusive of masters) dying before the termination of the voyage, received by the Board of Trade." The return includes the deaths of most seamen who die ashore in foreign countries after being discharged from their ships, but does not include the deaths occurring in the United Kingdom after discharge. The causes of death, moreover, which are in the Parliamentary Return classed under thirty-nine headings, are for the most part assigned by the masters of the vessels; their value for statistical purposes could not, therefore, be easily underrated. As regards the death-rate from all causes, calculated upon a strength which varied during the four years

1879–82 between 192,903 and 195,937, it was 19·0 per 1000 in 1879, and has since increased to 21·2 in 1880, 23·1 in 1881, and 23·8 in 1882. From the nature of the service, which necessitates a certain selection of men at the commencement of each voyage, and which loses sight of those whose health will not allow of re-engagement, it is patent that no materials exist for the calculation of a death-rate that can be compared with the death-rate of landsmen. With regard to the mortality from violence, including drowning and other forms of accidental deaths, the facts given are probably more trustworthy. The return alluded to shows that 3453, or nearly 75 per cent., of the 4659 deaths from all causes in 1882 were the result of violence; the deaths from violent causes were 2945 in 1880 and 3178 in 1881, showing a steady increase during these three years. These deaths included 2654 from drowning in 1880, 2905 in 1881, and 3167 in 1882. From the Board of Trade Statistical Abstract it appears that in 1878 one seaman in 156 was lost by wreck, or otherwise, from vessels belonging to the United Kingdom; this ratio of loss increased to one in 134 in 1879, 1 in 98 in 1880, and further to 1 in 66 in 1881, and 1 in 61 in 1882. That this steady increase of the loss of life by drowning in the Merchant Service calls for investigation, few will venture to deny, and most will agree with the Social Science Association, that the unsatisfactory returns of the causes of death at sea afford dangerous facility for the concealment of gross negligence or worse, which had it occurred on land would almost inevitably be the subject of inquiry before a coroner. It is not so easy to provide a remedy for the present evil. The satisfactory medical registration of causes of death at sea, in the absence both of the body and of any medical evidence, appears to suggest almost insuperable difficulties. There does not, however, appear to be the same difficulty in the way of an inquiry into the circumstances attending all deaths occurring during a voyage, to be held before the crew is paid off. There can be no question that some such form of inquiry should be devised with a view to diminish the present high rate of mortality in the British Mercantile Marine.

THE ITALIAN MEDICAL REVIVAL.

THE political and material resuscitation of Italy is unquestionably one of the great events of contemporary history. The artificial divisions of the Peninsula, enacted at the Congress of Vienna, were only powerful for a time in arresting the intellectual development of the Italian people. Once the spell was broken, the force of the Italian genius reasserted itself, and its expansion grows. Members of the medical profession have been active, often foremost, in the work of regeneration. Cavour found one of his most able and trusty lieutenants in Dr. Lanza. Zannetti, Rizzoli, and Palasciano were ornaments and supports to the Italian Senate; and the names of Paolo Fabrizi, Farini, and Baccelli are only a few more of those of eminent physicians and surgeons who have contributed, at one and the same time, to medical literature and statecraft in the Peninsula. Modern aspirations have been powerfully aided by the traditions and resources of the old municipalities and universities. If Pavia and Padua have not quite held their own, Turin has added to her fame as a *place d'armes* that of a thriving university, under such leaders as Bizzozero and Novaro. Milan is now a great publishing centre. Modena and Parma have risen vastly in importance as clinical schools. At Bologna Loreta has sustained, with some of the boldest achievements of modern surgery, the fame bequeathed by Rizzoli. The Encyclicals of Leo XIII. notwithstanding, Rome has become a centre of greater intellectual activity than at any former period in the history of modern Italy; while Naples, with its 1200 students and its staff of distinguished teachers, is, for numbers and activity, in the very front rank of contemporary medical schools. It has just sent forth the first numbers of two new medical serials, *La Medicina Contemporanea*, under the editorship of Prof. Mariano Semmola, and the *Rivista Internazionale di Medicina e Chirurgia*, directed by Dr. A. Raffaele. At Milan, Drs. P. Panzeri and F. Margary have recently issued the first number of the *Archivio di Ortopedia*, profusely illustrated, thus raising to 54 the number of Italian medical periodicals; of these 10 are published in Milan, 2 in Pavia, 1 in Padua, 1 in Venice, 6 in Turin, 3 in Genoa, 2 in Piacenza, 1 in Modena, 1 in Reggio d'Emilia, 2 in Bologna, 5 in Florence, 1 in Pisa, 2 in Rome, 1 in Forli, 12 in Naples, 3 in Palermo, and 1 in Messina. *La Gazzetta degli Ospitali*, which appears twice weekly at Milan, is a good example of journalistic enterprise; and *Il Morgagni*, a monthly serial issued at Naples, justifies its title and the reputation of its editors, Professors Salvatore Tommasi and Arnaldo Cantani. An equally able monthly is *Lo Sperimentale*, issued at Florence, Venice, and Milan, under an editorial council, numbering, amongst others, Professors Giorgio Pellizzari, Giuseppe Corradi, and Angiolo Filippi. If monographs and treatises are not relatively so numerous as the periodicals, it is nevertheless a fact that, in all departments of medicine and surgery, the Italians are every year giving proofs of increased activity—to wit, the writings of d'Antona, Bottini, and Mazzoni, of De Rossi, Massei, Maturi, and Bufalini. Thirty years ago Italian medical students were compelled to rely almost exclusively on translations from the French. German was little studied, and English so little as to justify the reproach of Cesare Balbo, "In Italia d'Inglese poco si legge" (English is little read in Italy). All that is changed. Our *confrères* in the Peninsula are giving abundant proofs of originality and erudition: and all who remember the great benefits conferred on our profession and the world by the old Italian teachers, look forward with pleasure to their successors establishing new titles, to be acclaimed as rivals in modern research.

UNQUALIFIED PRACTICE AND "DISPENSARIES."

AFTER all that has happened, it is very unlikely that any qualified medical man should place himself in questionable relations with an unqualified practitioner. An inquest the other day at Islington raises this question. The mother of Jessie Adams, six months old, took her, having the whooping-cough, to Mr. Robert's dispensary, Hanley-road, Holloway. The word "dispensary" now has an altogether misleading effect. It suggests both medical qualification and a committee to guarantee the respectability of the establishment. The child got worse, and then Mr. Roberts recommended the mother to call in Mr. Wagstaffe. The mother immediately did so, but the deceased died the next day. Mrs. Adams said when she took her child to Mr. Roberts she thought he was fully qualified. The only qualification Mr. Roberts claimed for himself was that he was "a surgeon assistant, and had walked the University College Hospital." He said he was not a registered practitioner, but "'Dr.' Wagstaffe's assistant." This is an old story. It was denied by Mr. Wagstaffe, who refused to give a certificate, and reported the case to the coroner, who properly exposed to the jury the system of dispensaries worked by unqualified assistants, generally under the protection of a qualified man, who sees the cases "tending to death" just in time to certify. It is due to Mr. Wagstaffe to say that he entirely denied the theory of Mr. Roberts. We are bound to accept his denial, but he did not quite explain how Mr. Roberts came to send for him in the emergency. We solemnly warn medical men against such alliances. It can scarcely be doubted that any such offence brought home to a medical man before the Medical Council will be followed by the removal of his name from the Register.

THE DEATH-RATE IN LONDON TENEMENTS.

IN connexion with his annual report on the sanitary condition of Marylebone during 1883, just issued by Mr. Wynter Blyth, special reference is made to the influence of tenement life on mortality in his district. A number of streets and courts, mainly occupied as tenements, have been inspected in detail, and the result is to show that tenement life, as existing in the localities specified, is seriously inimical to health. In Burne-street, near the Edgware-road, six out of forty-two houses were found destitute of drains, others had old brick drains, not trapped before entering the sewer. The mortality there has been at the rate of 24 per 1000 living, the excess having been to an important extent due to zymotic, tubercular, and lung diseases. The now notorious court, called Devonshire-place, with its damp dwellings, faulty brick drains, and on one side abounding in sanitary defects, has during the past seven years exhibited the enormous average mortality of 39 per 1000, consumption and zymotic disease sharing largely in the spoil. Edward's-place has been partially demolished under Torrens' Act. It has been difficult to arrive at an average rate here, both because the population has been comparatively small, and because of secret and illegal night occupation, but it is put down at 35 per 1000. Gee's-court, running out of Oxford-street, contains some respectable lodging- and other houses, but it is a gloomy, confined place, with a stagnant air; it also contains many old people, together with crossing-sweepers and others, who in their miserable callings are much exposed to cold and wet. During the past seven years the average death-rate has reached 30 per 1000, bronchitis being a principal cause of death. Horace-street is a narrow, enclosed, and unfortunately situated street, approached at either end by archways; the houses are small, containing as a rule four rooms only, and some of them have been already condemned under Torrens' Act. Here the average death-rate has been 32 per 1000, consumption and other lung diseases causing a large mortality. The death-rate for Marylebone as a whole, including such localities as those specified, was last year 20 per 1000; hence it becomes evident that in these tenements, which as a rule consist only of a single room, often damp, at times offensive from want of sanitary precautions, and generally overcrowded at night, the duration of life is seriously curtailed. The deaths from pulmonary consumption are especially sad; but when it is remembered that many of the occupants of these tenements are needlewomen, tailors, and others following similar occupations, it becomes evident that the conditions under which they live are precisely those calculated to induce this disease. As a matter of fact, the mortality from this affection is necessarily underrated in the report; for, as Mr. Wynter Blyth says, when people belonging to the classes concerned fall ill and fail in health, they to a large extent seek and obtain a bed in some one of the metropolitan hospitals, and die away from their former homes.

LONDON OMNIBUS AND TRAMWAY MEN.

THE traveller by omnibus or tramcar is aware that these vehicles run at almost any hour late or early, except, or even without excepting, the small hours of the morning. He must have observed that their drivers and conductors continue at their posts, on the same route and on the same conveyance, for weeks or months, with little or no intermission of service. The day's work with most of these men is from about 8 A.M. till midnight, sixteen hours, time for stabling horses and car not being included. The hours for sleep are commonly five out of the twenty-four. Meal-times are practically included in working time. The day, therefore, may be divided into two parts—one of effort, eighteen to nineteen hours, and one of sleep, five hours. Sunday is no exception. It necessarily follows that recreation, mental or physical, in any systematic form is unattainable, for work occupies almost every waking hour; holidays are rare, and are not unusually equivalent to loss of pay. Work of this kind certainly does not exhaust so rapidly as severe mechanical toil. It nevertheless entails considerable muscular and nervous strain, which is continuous over too long periods. It includes the concentration of thought on many and similar minutiæ of duty, which can never by repetition cease to be voluntary acts. Long standing in one position is another grievance. If less laborious, it is also less salutary in its nature than free exercise of limb. It tends directly to cause venous congestion and varicosity in the lower extremities. Some thought and outlay are necessary, no doubt, to remedy the conditions which we have discussed. Obviously the number of *employés* should be increased, and we would also urge that suitable seats be provided for conductors as well as drivers. As things exist there is probably less consideration for the men, whose illness is their own loss, than for the horses, whose bodies are their masters' vested capital.

"INFANTILE CONVULSIONS."

WE learn from the *Bristol Mercury* of April 4th that on the previous day an inquest was held by the city coroner at Kingsdown, on the body of a child aged thirteen weeks, who, as alleged by the father, had not been in good health since it had been vaccinated. There does not appear to have been a post-mortem examination. The coroner, who, by the way, is not a medical man, is reported to have said "that, from the appearance of the body, death was probably due to infantile convulsions." We must express our regret at the way in which it is becoming the fashion to conduct inquests on the bodies of young children the cause of whose death is problematical. The expression "infantile convulsions" conveys to our mind very little information. No doubt children are more liable to convulsions than adults, but they have not absolute possession of this particular form of incoördinated muscular action. They are subject to the same laws that regulate the organic processes as people of mature age. An infantile convulsion is merely a convulsion in an infant, whether it be due to a poison, to overlaying, to reflex irritation, or, according to the legally accepted verdict, to the "visitation of God." Then, again, there was a further reason why, as we think, a post-mortem examination should have been performed in the above-mentioned case: discredit was indirectly thrown on the cause of vaccination—not logically we admit; for to conclude that, because a child was not so well after vaccination, therefore vaccination was the cause of the illness, is an instance of the *post hoc propter hoc* fallacy in reasoning; nevertheless, the uneducated portion of the community look upon such fallacies as identical with, or close akin to, truth.

ON DOCKING HORSES.

AN ably-written paper on this subject, by Mr. Edward Stanley, F.R.C.V.S., was discussed at the meeting of the Midland Counties Veterinary Medical Association, held at the Grand Hotel, Birmingham, on the 3rd inst. Mr. H. M. Stanley presided, and the attendance was a large one. It was decided that docking should not be indiscriminately practised, and that the operation should be scientifically performed; but in spite of the substantial unanimity of the meeting, the question cannot be regarded as settled. The writer of the paper defended the operation on the score of cleanliness and comfort to horse and owner, as conducive to safety and utility, especially in single harness, and as improving the appearance, and thereby enhancing the value, of horses. It is no disparagement to the authority of the veterinary surgeons who took part in the discussion, to recall

the fact that such authorities as Professor Prichard and Mr. George Fleming are opposed to them. The latter gentleman feels so strongly on the matter, that finding himself unable, through pressure of official duties, to attend the meeting, he addressed an elaborate memorandum to the President, in opposition to the conclusions of Mr. E. Stanley's paper. Mr. Fleming's name is widely known, as that of a voluminous and able writer on veterinary science; and he holds the two very important offices of Principal Veterinary Surgeon to the Army, and President of the Royal College of Veterinary Surgeons. So long as such a witness can be subpœnaed by the Royal Society for the Prevention of Cruelty to Animals, its Council is not likely to desist from its avowed purpose, of putting an end to the practice of docking horses as cruel and useless.

THE PRELIMINARY EDUCATION OF MEDICAL STUDENTS.

THE Reports of the College of Preceptors, submitted from time to time to the Medical Council, on the results of the Preliminary Examinations held by the College, for medical students and others, are of much interest. The last will be found in THE LANCET of March 29th, p. 572. It does not show much advance in the general education of the country or of those classes which supply the medical profession. Of 264 candidates 182 failed in obtaining certificates qualifying them to become medical students. Twenty of these passed in all the obligatory subjects, but did not obtain the minimum total of marks required for a place in the second division of the second class, as required by the Medical Council. Of the remaining 162 rejected candidates, 61 failed in 1 obligatory subject, 26 in 2, 26 in 3, and 38 in 4 (and more) obligatory subjects. Thirty-two candidates were reported for defective spelling, but only one was disqualified on this account.

A QUESTION OF MEDICAL TITLES IN A COUNTY COURT.

AT a trial a few days ago in the Hyde County Court the main question to be tried was a claim for injuries sustained by a girl from horses running out of a field without a gate to it. The judge ruled for the plaintiff, the girl's father, on the ground that the defendant's field had not a gate, and that he should keep his horses under better control. The attention of the court was somewhat diverted from the real question by a lively dispute between the lawyer for the plaintiff and a medical man (sent by the defendant to the patient) as to the right of the latter to use the title of M.D. on the strength of the licence of the King and Queen's College of Physicians, Ireland. The contention on this point was unnecessarily warm. Mr. Howard, the medical man in question, maintained that he was a veritable M.D., a Doctor of Medicine; the lawyer that he was not. There is no doubt that the lawyer here was right. The moral of the wrangle is not to raise secondary questions, especially on infirm grounds.

GUARDIANS AND INSANE PAUPERS.

MR. BARON HUDDLESTON is much to be commended for the good service he is doing by a vigorous administration of the law in aid of the helpless. A few weeks ago this wise judge had a word to say on the subject of the scandalous state of the law in relation to the facilities afforded for the incarceration of alleged lunatics in asylums. He has more recently, in a case left to his adjudication by consent, cast a board of guardians in damages for placing a pauper lunatic in a ward where he was inefficiently protected and committed suicide. The widow of the deceased brought an action against the guardians of St. George's-in-the-East, and Mr. Baron Huddleston gave damages to the amount of £350, wisely allotted to the several members of the family. His lordship also refused to stay execution. We are heartily glad to find the bench thus enforcing the law on behalf of the poor and oppressed.

THE HEALTH OF HER MAJESTY.

IT will be gratifying to the public to learn, as it is to us to be able to report, that Her Majesty's health, under all the trying circumstances of the present time, is very satisfactory. It is not her least virtue that she bears bravely and piously the afflictions imposed on her.

THE "DRINK" TAINT.

IT cannot be questioned that the craving for alcoholic stimulants may, like every other appetite, inclination, or propensity, be transmitted. This follows upon the fact that all that is mental or moral in man is based upon and arises out of his organic constitution. If certain educated or conformed brain-cells are reproduced in obedience to the law which makes every living thing bring forth seed "in its kind," it is a necessity that the child shall, in its morals as well as physically, resemble its parent, and that it should physically consist of the combined result of its two lines of parentage. This is the physiological argument for the reformation of criminals and drunkards. If we desire to improve the race, we must cut off the line of the incurably bad, and repress the evil as well as cultivate the good, in those who are allowed to procreate.

PORTRAIT OF SIR T. SPENCER WELLS.

WE have great pleasure in noticing a portrait of Sir Spencer Wells, which has been published by Mr. D. H. Menzies of Glasgow, whose portrait of Sir Joseph Lister we had also to notice very favourably. The portrait is a copy of a crayon very carefully executed by Mr. Michael Hanhart. It gives Sir Spencer's best expression of mingled clearness and firmness, and, if we mistake not, will be exceedingly acceptable to the profession. We congratulate the subject of the portrait on the success of the artist.

PREVENTION OF BLINDNESS.

THE committee of the Manchester and Salford Sanitary Association have issued, in the form of a leaflet, a series of judicious precautions to be observed for the prevention of blindness as a result of purulent ophthalmia in newly-born infants. The subject was, it will be remembered, brought under the notice of the members of the Ophthalmological Society at its meeting on the 13th ult., and is, as we remarked at the time, one of very great importance.

AT the instance of Dr. Cameron, a Select Committee has been appointed to inquire into the alleged defects of the Commissariat and Transport Services in the Egyptian campaign, the following gentlemen being nominated as members:—Mr. Brand, Dr. Cameron, Colonel Milne-Home, Colonel Stanley, Mr. Carington, Mr. Dawnay, Mr. Brown, Mr. Jackson, Colonel Kingscote, Sir H. Fletcher, Lord E. Cavendish, Colonel Nolan, Mr. Earp, and Mr. Herbert.

THE number of cases of small-pox at Whitstable has, notwithstanding the prompt and energetic measures adopted by the sanitary authority, increased. It is suspected that the disease was introduced into the town by a seaman from the North, and colliers arriving from Sunderland are closely watched.

A BILL has been introduced into the Lower House of Congress providing that any vessel bringing passengers to the United States shall be furnished with hospital apartments on board, one for men and the other for women, each of an area of eighteen square feet for every fifty persons on board. The Bill provides also that vessels carrying other than cabin passengers shall carry a licensed surgeon, if the ship's company exceeds fifty persons, and an additional medical officer in case the number is more than 600, together with the necessary medical and surgical supplies.

COPENHAGEN AND THE INTERNATIONAL MEDICAL CONGRESS OF 1884.

No. II.

IN proportion to the population of Denmark, the number of Danish medical men is large, as is the case in almost every country. In the city of Copenhagen, where the inhabitants number some 250,000, there are more than 350 doctors, of whom about 250 are general practitioners, the remainder being mostly either young medical men in the hospitals or elderly gentlemen who have retired from practice. As has already been mentioned, there is no difference made between surgeons and physicians, inasmuch as all have to pass the same examination at the university, and this gives the whole profession a uniformity which does not exist in England. With the exception of a few specialists and surgeons, the majority of medical men are general practitioners, and it is customary for each household to have its own doctor, who, in return for his services, receives a fixed annual fee varying in amount according to the means of the family. This arrangement is attended with its advantages and disadvantages, but is generally thought satisfactory to both parties concerned. It tends to make the incomes of the medical men more fixed and permanent, and it affords the patient the opportunity of calling in his doctor for what may be either serious or trifling complaints. As an illustration of this latter, there is a trustworthy story of an elderly lady sending for her doctor late at night because she was troubled in her mind as to whether it would be prudent for her to eat a baked apple the first thing in the morning.

In Denmark medical men hardly ever attend normal deliveries. These cases are left entirely to midwives, who have to attend a midwifery school at the Lying-in Hospital for the greater portion of a year, and then to pass an examination previous to being allowed to practise. Of late, however, there has been a movement in the medical profession in favour of general practitioners undertaking these cases, though as yet the movement has not met with much success. A change which would probably meet with most approval would be for educated ladies, qualified as midwives, to undertake these cases. At present their number is small.

The social position of members of the Danish medical profession is almost the same as in England, excepting that there are very few who have large incomes from their practice. Fees, as in England, are here considered only a *pium desideratum*, and are as a rule much smaller. Consequently a man with an average income is only tolerably well off, but as wealth is more equally divided in Denmark than in England, a small income has not the same significance. While one meets with few millionaires, but few paupers are to be seen. One observes in the streets of Copenhagen nothing approaching the luxury in the outward appearance of life which prevails in England, but at the same time one does not encounter rags and misery, and such a thing as death from absolute starvation has hardly ever been heard of. The result of this financial equality is that money has not the same importance attached to it as in England, consequently that perpetual struggle to keep up appearances (an expression which does not exist in the Danish language) is unknown here, a man's education rather than his account at his banker's forming his passport into social circles.

There exists a good understanding between the Danish medical profession and the general public. One very seldom hears of a medical man being judicially accused of faults in treatment, and a fine in such cases is almost unknown. Such a thing would be ruin to any practitioner, as his case would soon be public property in a small country like Denmark. There is, too, a decidedly good feeling amongst the members of the profession themselves, at least in Copenhagen. There are, however, very few medical societies and clubs, partly owing to the fact that clubs do not flourish in this country, and partly because medical men, being chiefly practitioners, have very little time to spend outside their homes. This is also the reason why there are comparatively few Danish medical authors. There are four medical papers. One of these is for the whole of Scandinavia (the Norwegian language, save the accent, being exactly the same as Danish, while Swedish resembles Norwegian in accent, but differs somewhat from both in construction). The contributors are mostly young medical men whose practice affords them sufficient leisure to devote to literature.

Copenhagen possesses several hospitals. Very few of these have been established by private charity, or are dependent upon public subscription for support. These matters, like many others in Denmark, are taken in hand by the Government or the municipality. Now and then legacies are left to hospitals on condition that a number of beds may be reserved for people of a certain class, or patients suffering from specified diseases. There is a considerable difference between the hospital patients in Copenhagen and those in England. In the Danish city persons in all classes of society enter the hospitals for treatment. The wealthier people can be accommodated with private rooms if they so desire, but it is by no means an unfrequent occurrence to find them in the large wards along with others; a student, for example, alongside a workman, or a lady alongside a servant. The great difference between the English and the Danish hospitals lies, perhaps, principally in the fact that while the English are mere charitable institutions, the Danish provide medical treatment and nursing to all who require it, be they rich or poor. The wards never contain more than ten beds, several only three or four, and each physician or surgeon has his wards to himself. The oldest hospital in Copenhagen was built by the Government more than one hundred years ago, and is called Frederick's Hospital, after King Frederick V. It is connected with the university, as explained in a former article. Being old-fashioned it is rather inconveniently constructed, and its days seem to be numbered. It contains about 400 beds, and is divided into four departments, of which two are superintended by physicians and the other two by surgeons, all being professors at the university. This hospital is entirely supported by the State, with the exception of a few legacies. Close to Frederick's Hospital stands the Lying-in Hospital, the superintendent of which is also a professor at the university. Although an old building, it answers its purpose very well, and is certainly one of those which has the best mortality statistics. Opposite to this hospital is a large, dingy, ancient-looking building for the aged and poor suffering from chronic diseases; the inmates of both classes number about 1500. This institution does not afford much interest to medical men. The largest and best hospital in Copenhagen is the Kommune Hospital (the Municipal Hospital), built by the town authorities some twenty years ago. It consists of a very complete range of buildings, surrounded by gardens for the use of the patients. It is situated in the new quarter of the town, and faces on one side the Botanical Gardens, and on the other a large lake. It contains about 1000 beds. The patients are divided into six different departments, of which two are for internal and two for surgical diseases, one for nervous complaints and acute insanity, and one for diseases of the skin and syphilis. In this latter department any person suffering from venereal diseases can be admitted gratuitously at any time, but must in that case remain in hospital until he has completely recovered. There is a medical director for each department, assisted by one assistant-physician or assistant-surgeon, who lives in the hospital and attends the patients daily together with the director, and takes his place in case of illness or leave for holidays. Besides this, each department has three or four house-surgeons or house-physicians, who also live in the hospital, and receive and examine all the new patients, and treat them until the physician or surgeon comes to his wards the next morning. In addition to these, there are connected with the hospital numerous medical students acting as clerks,

dressers, &c. All medical men are paid, and those who live in the hospital have free residence. The superintendents of the departments—the physicians and surgeons, as they are called in England—are elected for six years, but are as a rule re-elected two or three times; they have generally a large private practice besides. The assistant physicians and surgeons are, as a rule, men between thirty and forty, and are appointed to a department for three years; while the house physicians and surgeons are younger medical men, who hold their situations during two years, being four months in each department. The leading doctors visit their wards every day some time between eight and twelve. During the rest of the day there are always one assistant and six house doctors on duty in the hospital. A similar arrangement and classification of the medical men exist in the other hospitals of Copenhagen. The town has also a large lunatic asylum; it is called Sct. Hans (St. John's) Hospital, and is beautifully situated at Roeskilde, a small town about sixteen miles from Copenhagen, and famous on account of its cathedral, containing the tombs of the Danish kings, most of whom, from Harold I., repose here. It has more than 1000 patients from all classes of society. There are, besides, two other lunatic asylums in Denmark, both belonging to the State, and a third is in process of building; but no private ones exist. In addition to these, there is a large hospital for infectious diseases, called Blegdams Hospital, situated in a large field outside Copenhagen. Here there is a separate building for each disease. There are also several smaller hospitals, amongst which is Queen Louise's Hospital for Sick Children, a handsome new building situated close to the Municipal Hospital, and the Deaconess' Hospital, mostly for people of the better classes, situated in one of the suburbs. Both of these hospitals were erected by private contributions. It will be seen that, for its size, Copenhagen is well supplied with hospitals and similar institutions, and that it must be easy for any sick person to gain admission to one hospital or another. Any person who has met with an accident is admitted at once, and the sick poor are admitted either to legacy beds or by certificates from district doctors, of whom there are several in Copenhagen. Besides, to prevent the spread of venereal diseases, any person suffering from any of these is received gratis and at once at the Municipal Hospital in Copenhagen, or any other town in Denmark.

From this and the preceding article it may be seen that all things relating to both the intellectual and physical welfare of the people are left entirely in the hands of the public authorities, the result being in many ways highly beneficial, but having the great drawback that it tends to suppress to a great extent private enterprise, and in many cases to enervate those who in other countries would have a sharper struggle for existence.

VITAL STATISTICS.

HEALTH OF ENGLISH TOWNS.

In twenty-eight of the largest English towns 5983 births and 3809 deaths were registered during the week ending the 5th inst. The annual death-rate in these towns, which had been equal to 22·6, 22·1, and 20·0 per 1000 in the three preceding weeks, rose again to 22·7 last week, and was higher than in any previous week of this year. The lowest rates last week were 14·3 in Brighton, 14·6 in Huddersfield, and 16·5 in Leicester. The rates in the other towns ranged upwards to 30·4 in Manchester, 31·3 in Cardiff, and 36·2 in Oldham. The deaths referred to the principal zymotic diseases in the twenty-eight towns, which had been 486 and 471 in the two previous weeks, rose to 529 last week, exceeding the number in any previous week of this year; they included 184 from whooping-cough, 143 from measles, 75 from scarlet fever, 41 from "fever" (principally enteric), 37 from diarrhœa, 28 from diphtheria, and 21 from small-pox. The death-rates from these diseases were lowest last week in Brighton, and highest in Oldham, Leeds, and Preston. The greatest mortality from whooping-cough was recorded in Bolton and London; from measles in Oldham, Wolverhampton, and Portsmouth; from scarlet fever in Preston, Leeds, and Sheffield; and from "fever" in Blackburn. The 28 deaths from diphtheria in the twenty-eight towns included 14 in London, 4 in Cardiff, 3 in Birmingham, and 2 in Portsmouth. Small-pox caused 13 deaths in London, 3 in Birmingham, 2 both in Liverpool and in Sunderland, and 1 in Newcastle-upon-Tyne. The number of small-pox patients in the metropolitan asylum hospitals and hospital ships, which had been 148, 201, and 264 on the three preceding Saturdays, further rose to 273 at the end of last week; the new cases admitted to these hospitals during last week declined, however, to 39 from 65 and 92 in the two previous weeks. The Highgate Small-pox Hospital contained 13 patients on Saturday last, one new case having been admitted during the week. The deaths referred to diseases of the respiratory organs in London, which had been 373 and 359 in the two previous weeks, further declined to 357 last week, and were 148 below the corrected weekly average. The causes of 90, or 2·4 per cent., of the deaths in the twenty-eight towns last week were not certified either by a registered medical practitioner or by a coroner. All the causes of death were duly certified in Brighton, Portsmouth, Leeds, Salford, and in three other smaller towns. The proportions of uncertified deaths were largest in Oldham, Hull, and Halifax.

HEALTH OF SCOTCH TOWNS.

The annual rate of mortality in the eight Scotch towns, which had been equal 20·9, 21·3, and 23·7 per 1000 in the three preceding weeks, further rose to 24·1 in the week ending the 5th inst.; this rate exceeded by 1·4 the mean rate during the same week in the twenty-eight large English towns. The rates in the Scotch towns last week ranged from 14·8 and 16·9 in Leith and Dundee, to 26·1 in Glasgow and 28·5 both in Aberdeen and Paisley. The deaths in the eight towns included 101 which were referred to the principal zymotic diseases, against 74 and 88 in the two previous weeks; 42 resulted from whooping-cough, 20 from diarrhœal diseases, 12 from diphtheria, 11 from measles, 7 from "fever," 5 from scarlet fever, and 4 from small-pox. The rate from these diseases in the Scotch towns last week averaged 4·2 (against 3·2 in the English towns), and ranged from 3·1 and 3·5 in Leith and Dundee, to 5·1 and 6·7 in Aberdeen and Perth. The fatal cases of whooping-cough, which had been 23 and 35 in the two previous weeks, further rose to 42 last week, of which 21 occurred in Glasgow, 10 in Edinburgh, and 4 in Aberdeen. The 20 deaths from diarrhœal diseases also showed a further increase upon recent weekly numbers, and exceeded by 7 the number in the corresponding week of last year. The 12 deaths attributed to diarrhœa showed a decline of 6 from the number in the previous week, and included 5 in Glasgow and 3 in Dundee. The 11 fatal cases of measles also showed a decline, 5 occurring in Edinburgh and 3 in Paisley. Of the 7 deaths referred to "fever" 3 occurred in Aberdeen and 2 in Glasgow. All the 4 deaths from small-pox occurred in Glasgow. The deaths referred to acute diseases of the respiratory organs in the eight towns, which had been 117 and 108 in the two previous weeks, were 112 last week, and were 157 below the number in the corresponding week of last year. The causes of 90, or more than 15 per cent., of the deaths in the eight towns last week were not certified.

HEALTH OF DUBLIN.

The rate of mortality in Dublin, which had been equal to 27·5 and 27·2 per 1000 in the two previous weeks, rose to 29·6 in the week ending the 5th instant. During the thirteen weeks of last quarter the death-rate in the city averaged 27·9 per 1000, whereas it did not exceed 20·4 in London and 20·6 in Edinburgh in the same period. The 199 deaths in Dublin last week showed an increase of 16 upon the number in the previous week, and included 20 which were referred to the principal zymotic diseases, against 20 and 17 in the two previous weeks; 9 resulted from scarlet fever, 8 from "fever" (typhus, enteric, and simple), 3 from diarrhœa, and not one either from small-pox, measles, diphtheria, or whooping-cough. These 20 deaths were equal to a zymotic rate of 3·0 per 1000, the rate from the same diseases being 3·4 in London and 4·0 in Edinburgh. The fatal cases of scarlet fever, which had been 6 and 1 in the two previous weeks, rose to 9 last week, and exceeded the number in any week since the middle of January. The 8 deaths from "fever" showed a decline of 2 from the number in the previous week. The deaths of infants showed a marked decline, while those of elderly persons had increased. Four deaths resulted from violence, and 71 were recorded in

public institutions. The causes of 27, or nearly 14 per cent., of the deaths registered during the week were not certified.

Correspondence.

"Audi alteram partem."

THE ROYAL COLLEGE OF SURGEONS.

To the Editor of THE LANCET

SIR,—The Council of the Royal College of Surgeons of England have promulgated all the alterations in the charter and bye-laws that in their judgment are required. The Fellows and Members at the meeting held at the College on March 24th made further suggestions; but, notwithstanding, I hear it asked, "Can nothing further be effected for the benefit of the College?" So I venture to solicit space in THE LANCET for some suggestions in this direction. The future management of the College can in no way personally affect myself; my only desire is that the College should be so managed as to be of the most value to the public and the profession. The object of us all should be that the influence of the opinion of the College on the profession and the public, more especially on the governing bodies of the country, should be abreast with any medical corporation in Her Majesty's dominions. The memories of the past, the guardianship of that unrivalled museum, with the present prestige of the College demand nothing less.

I fear it must be conceded that hitherto the opinions of the College of Physicians have had greater weight with the public and Governments of the day than the College of Surgeons; the influence of the latter has been more that of individuals than of the College. One reason of this is, I think, the quasi-permanency of the office of president of the College of Physicians. The custom at the College of Surgeons is that as soon as the president becomes known to the public and warm to his work, he goes out of office, and the next in office takes his place. This for many reasons is unadvisable; it may be inexpedient, at times of new Medical Acts of Parliament, revised charters, and altered bye-laws, to remove the president from the chair just when he has got thoroughly acquainted with all that is necessary to meet such cases. No doubt the charter gives power to re-elect, as often as the Council pleases, the same president; it was once attempted to re-elect an outgoing president, but it met with a very feeble response. The reason is not far to seek. There must always be a great disinclination to vote against one who has been twice elected a vice-president. To meet this apparent difficulty, I would say, do away with the offices of vice-presidents. They are the survivals of the "wardens" of an old City company, and not the fittest. There is no peculiar duty attached to the office, it is by no means necessary, and hampers the Council in the choice of a president, and in my opinion the office is prejudicial to the well working the internal affairs of the College: for example, the president and two vice-presidents are *ex officio* members of the committees of six persons, one of the other three being chairman, thus giving an overweight to the influence of officials. The president does not go out of the Council whilst holding that office. To prevent any stagnation in the supply of new members of Council I would make the president an *ex officio* member of Council and increase the number of the Council to twenty-five, none too many for such a constituency.

The committees I have mentioned, who virtually carry on the internal affairs of the College, are peculiarly constituted as to the most important one—viz., the "Committee of Auditors"—on which it is the custom to place the three last elected members of Council, presumably those least acquainted with the affairs of the College. The president and vice-president are called the treasurers, and are thus called upon to audit their own accounts. In lieu of vice-president, I would suggest that a member of Council should be appointed treasurer, who should have the supervision of the finances of the College. I know of no institution of like importance which lacks such an officer.

Before leaving the question of finance, let me ask, as it has been decided that it is undesirable that any fee should be paid by those elected Fellows under Section 5 of the charter, why should the alterations stop here? Why should any fee be paid by those elected into the Council? Why should those called upon to undertake an onerous and troublesome office be compelled to pay for it? And this applies as well to the Court of Examiners. The sums paid annually are small, usually under £100. I think the practice of making payments to the Council would be more honoured in the breach than the observance. Individually the payment as a recognition of the time and labour given to the College is absurd. The sums amount to about £200 or £250 a year, and might, I think, with more fitness be voted as an honorarium to the president in recognition in some measure for the time (meaning in his case income sacrificed) given to the affairs of the College.

There is no question that I find Fellows and Members of the College, and even those beyond them, take so great an interest in as the appointment of examiners. By all means pay them well; they well deserve that; but all sections of charters and bye-laws should be repealed that restrict the choice to Fellows of the College. One principle, and one only, should be the guide in this matter; that the person most likely to make the most capable examiner should be elected, whether he may belong to the College of Surgeons or to any other college, or to no college at all. In the future, whatever may be the results of legislation on the status of the College of Surgeons, it must greatly depend on the character of the examinations for their Fellows and Members. This point has already been conceded as to the examiners in medicine and midwifery. Are not surgery, anatomy, and physiology subjects of equal importance?

I would suggest, for reasons obviously unnecessary to state, that Section 5 of the bye-laws—viz.: "Should any member of the Council be absent from more than two successive quarterly meetings without leave of the Council, shall be liable to removal therefrom by resolution of the Council, unless a reason for such absence satisfactory to the Council be assigned," shall be altered as thus: "Any member of Council being absent for more than two successive quarterly meetings shall cease to be a member of Council."

I have only one more suggestion, and that is relative to the necessity of candidates for a seat in the Council to bring a certificate signed by six Fellows, usually his juniors, that he is a "fit and proper person, &c." This is thought by many to be a derogatory position in which to place a gentleman of the standing of Fellow of the College of Surgeons, and to my knowledge it has kept out of the Council some good men, thus acting prejudicially to the best interests of the College. It should be sufficient for a candidate to state that he is *bonâ fide* in practice as a surgeon, and not acting as an apothecary, and then let the Fellows use their own judgment as to placing him in the Council.

In writing this letter my sole object has been that it may be said of us in the future as was said of old—

"Then none were for a party,
Then all were for the State."

I am, Sir, your obedient servant,

Savile-row, April 5th, 1884. CHARLES HAWKINS.

To the Editor of THE LANCET.

SIR,—The proposal of Dr. Hickman at the general meeting of the Fellows and Members of the College of Surgeons is of such a momentous nature that I feel I need make no excuse in addressing you on the subject. Dr. Hickman proposes that the Colleges of Physicians and Surgeons amalgamated into one great body, should be empowered to confer on its licentiates "the degrees and titles of Doctor of Medicine and Master in Surgery." This, as the leading article of your last issue observes, is a matter deserving of fuller and more leisurely consideration. I think so. Dr. Hickman proposes that the licentiate of the amalgamated Colleges should be permitted to write after his name, Licentiate of this amalgamated College. Let us say, L.A.C., and, in addition to this, M.D., M.S., so that his full title would be L.A.C., M.D., M.S. Such a proposal strikes me as being most humourous. Dr. Hickman fails, as so many do, to recognise the essential nature of a degree. A degree can be granted by a university alone. As well might the Royal Academy or the Geographical Society receive authority to grant degrees. Empower any body with authority to confer degrees and it becomes a university, so that Dr. Hickman's suggestion is tantamount to one having for its object the conversion of the two colleges into one

university. The M.D. degree of a good university is not coveted because it entitles one to call himself doctor, but for its intrinsic value. There is no reason, in my opinion, why such an amalgamated licentiate as Dr. Hickman suggests should not receive the title of Doctor—i.e., be permitted to style himself Doctor, just as a man might style himself Surgeon Smith, Architect Jones, or Sculptor Robinson; but the word doctor applied in this, the popular sense, has a meaning widely different from that in which it is employed by a university. In the one case it is synonomous with the term "medical man," while in the other it retains the old meaning—i.e., learned, and expresses a distinct university grade or degree, and has a meaning hallowed by centuries. I take it that the course recommended by Dr. Hickman is altogether illogical. In the first place, if there is that complete blending of the Colleges which that gentleman suggests, each must lose its individuality; in the second case, gentlemen who wish to practise surgery alone will be saddled with the onerous M.D., M.S.; and thirdly, if a gentleman graduates at a university he will be in the unfortunate predicament of being, for example, John Jones, Esq., L.A.C., M.D., M.S. (Amalgamated Colleges), M.A., M.D. (Oxford). I entirely agree that the two great Colleges should unite in the sense of so arranging their examinations that these should lead to a complete and systematic course of medical study. Much more might be said on this matter, but I have already more than sufficiently trespassed on your space, and will therefore refrain.

I am, Sir, faithfully yours,
HARRY CAMPBELL.

Guilford-street, Russell-square, April 2nd, 1884.

INFANTICIDE.

To the Editor of THE LANCET.

SIR,—Referring to the annotation in your issue of the 5th inst. on the above subject, the following case may be considered as confirmatory of your remarks as to the importance of making post-mortem examinations of the bodies of all infants found under suspicious circumstances.

On Jan. 2nd, 1879, I was requested by the coroner to examine the body of an infant which had been found in a parcel at the local terminus of the London and North-Western Railway. It had been sent from Yorkshire, and bore a name with the direction, "To be left till called for." In accordance with the usual regulations it was opened, and on the contents being discovered it was handed over to the police. I found the body to be that of a fully matured male child weighing eight pounds and a quarter. The cord had evidently been torn at some distance from the umbilicus, and was not tied. The lungs presented the appearance of partial respiration, and, with all the other organs, were much congested. The opinion I gave at the inquest was that the child had partly respired and died during, or very shortly after, birth from neglect and exposure to cold. The first was indicated by the condition of the cord, the second by the congested state of the internal organs, which also negatived the idea of death being the result of hæmorrhage. The verdict was the usual one of "wilful murder by some person or persons unknown," and there was the usual probability that the case would end there.

But two months later I was summoned to a magisterial investigation at Leeds, when the following history was gathered from the evidence given by the witnesses. The mother of the child was a domestic servant in the house of a single gentleman, and had borne several children. The child was born on Dec. 31st, 1878, a fellow-servant being present, whose evidence was thus of great interest to me. She stated that the child was born suddenly while the prisoner was standing up, and that the cord broke off of itself. The child moaned slightly two or three times, and receiving no attention, it soon died, the weather being bitterly cold and there being no fire in the room. Next day the prisoner placed the body in the same brown paper parcel in which it was found, and left it on the platform at the Huddersfield station, where it was picked up by a porter and forwarded. The prisoner was subsequently brought up at the ensuing York assizes on a charge of concealment of birth, and, pleading guilty, was sentenced to three months' imprisonment. The counsel for the prosecution described it to me as a case as near to murder as it could be. My statements at the inquest, given in entire ignorance of the circumstances of the birth as subsequently disclosed, were confirmed by the evidence; and the case shows the importance of careful examination in all cases of apparent infanticide.

I am, Sir, yours truly,
FRED. W. LOWNDES,
Liverpool, April 7th, 1884. Surgeon, Liverpool Police.

LIVERPOOL.

(*From our own Correspondent.*)

BEQUESTS TO LOCAL MEDICAL CHARITIES.

THE following hospitals and dispensaries will receive legacies of £2000 each under the "Carlyle bequest" of the will of Mrs. Mary Tait, late of 22, York-terrace, Regent's-park, London:—The Royal Infirmary and Lock Hospital, the Northern and Royal Southern Hospitals, the North, South, and East Dispensaries, and the Infirmary for Children. Legacies of £1000 each have been left under the same will to the Eye and Ear Infirmary, Consumption Hospital, and Bootle Borough Hospital. These legacies will be all very welcome, though it is to be feared that in some cases they will have to be applied towards current expenditure instead of being funded.

THE PROPOSED NEW CATHEDRAL.

Of the many sites suggested for the proposed new cathedral of this city one is a mount overhanging a cemetery still used, though an intra-mural one; another a churchyard closed in 1854. Hence the question has its medical and sanitary aspects. The site is not yet absolutely decided upon, and it is hoped that the opportunity may be embraced of acquiring and destroying some of the insanitary property, of which there still exists a large amount in the centre of the city, notwithstanding many recent improvements. It is astonishing how largely we are indebted to the different railway companies for much of our sanitary improvements, and ecclesiastical authorities might well follow the example.

SOCIETY FOR THE PREVENTION OF CRUELTY TO CHILDREN.

The first annual meeting of this Society was held on the 31st ult., and was very well attended. The report of the Society's work during the first year of its existence showed that it had dealt with 218 complaints, involving 378 children. The complaints had been mainly of four kinds:—(1) Aggravated assaults or bodily injuries; (2) neglect; (3) begging, vagrancy, and exposure; (4) immorality. The City Council have recently passed certain bye-laws which will, to a large extent, prevent many of the evils now inseparable from juvenile street trading. Dr. Oxley, who was present, with several other members of the profession, dwelt upon the evils attendant upon children being entered in burial clubs, which offered a direct premium to parents to neglect them. Another speaker remarked upon the appalling fact that no fewer than 153 deaths of children from suffocation had come before the city coroner within the last twelve months. He added that if six of the mothers had been placed upon their trial there would probably have been a rapid falling off in the number of suffocation cases.

CRIMES OF VIOLENCE.

In spite of heavy sentences passed at the recent and previous assizes crimes of violence still continue. An inquest was recently held on the body of a man who committed suicide, as well as murder, his victim being the nurse of a parochial hospital in which he had been a patient. In another case a man has been committed for trial for the murder of an "unfortunate," under circumstances of the most revolting brutality, it being clearly proved by the dying deposition of the deceased and other evidence that the prisoner deliberately threw at her a lighted paraffin lamp, which set her on fire, and then left her to her fate. In a third case, a woman lies in the Royal Infirmary in a very dangerous condition, the result of a very violent assault by her half-brother. In two of these cases drink would appear to have been the exciting cause of the assault; in the third this element was absent, the motive being apparently revenge.

THE Local Government Board for Ireland have consented to an increase in the salary of Dr. Mayne, of the Rathdown Union, of £50 per annum.

NEWCASTLE-ON-TYNE.

(From our own Correspondent.)

NEWCASTLE EYE INFIRMARY.

THE annual meeting of our Eye Infirmary was held last week, and from the report it was shown that there had been a large increase of patients. Some necessary alterations were made in the rules, and it was decided to proceed with the erection of the new building at the north end of the city, which will involve an expenditure of nearly £4000. The charity has a considerable amount of invested funds, which must be trenched upon at first; but it is hoped that, considering the great advantages of this institution in a manufacturing community like Newcastle and Gateshead, this may be soon made up by benefactions.

LONGEVITY IN CLEVELAND, YORKSHIRE.

Having been in the Cleveland district lately, the following remarkable cases of longevity in husband and wife came under my notice. I may add that I made full inquiry, and that I believe the information I received was truthful. James Miller died lately at Boulby, near Loftus, Cleveland, of senile decay. He was ninety-five years old, and was in good health until a few days before his death. He smoked to the last. He wanted his bed removed just before he died, and his wife, Mrs. Miller, who had "an advantage," as will be seen, in point of seniority, and would at the same time appear to have considerable "force" of character, although she was ill at the same time, remarked, "Ay, he was always first and foremost all his life in everything, and now he wants to be so in death." Mrs. Miller did not long survive her husband, but died on March 17th last of senile decay. She was returned as 104 years of age; and her doctor thinks she might have been living yet had she not refused taking medicine. She had no movement of the bowels for three weeks before her death, and refused the doctor's help. A short time before her husband was taken ill Mrs. Miller wanted him to go to Hinderwell, a good stiff walk. He said he was not able to go; Mrs. Miller replied, "It was nothing but idleness of him." Mrs. Miller, like her husband, was a lover of the "weed," and enjoyed a smoke up to within a short time of her death.

NORTH OF ENGLAND MICROSCOPICAL SOCIETY.

Mr. Jeaffreson showed some sections of the spinal cord prepared by a new process, for which he claimed better hardening and differentiation of structure, his method consisting in (1st) steeping in solution of perchloride of iron for three or four weeks, or such time as the specimens may be required; 2nd, allowing them to stand for twenty-four hours in water, then immersing them in a solution of gum Arabic for twenty-four hours, then embedded and frozen; sections are then cut, which are washed in a very weak solution of tannic acid, and finally washed in the usual manner, as desired. The specimens were examined by the medical men and other members with a good deal of interest, and gave rise to some discussion. Mr. Davison and Mr. Harkus showed Amphipleura pellucida and Amphipleura Lindheimerii. Altogether the meeting was a most interesting one, and the Society is doing a good work in the interests of microscopical science.

Newcastle-upon-Tyne, April 1st, 1884.

IRELAND.

(From our own Correspondent.)

AMPUTATION BY CARDEN'S METHOD; DRESSING WITH WOOD-WOOL.

MR. ORMSBY, of the Meath Hospital, Dublin, has recently been using wood-wool dressing after operations, and speaks highly of it. The following are brief notes of a case in which this method was used:—A man aged fifty-three was admitted for disease of the tarsal bones of the left foot, extending for some distance into the lower ends of the tibia and fibula. Amputation was performed a hand's breadth below the knee-joint, ether being administered by the Ormsby inhaler; Carden's method, by oval skin flaps and circular division of the muscles, being the operation adopted.. At the second dressing wood-wool was applied—a method which, as far as I am aware, has heretofore not been used in this country. There was a little secondary hæmorrhage, which was soon controlled, and the case has since progressed favourably.

CORK UNION: RESIGNATION OF DR. CREMEN.

At the meeting of the Cork Board of Guardians last week, a letter was received from Dr. Cremen, one of the medical officers of the workhouse, resigning the appointment which he has held for the past ten years. Dr. Cremen, at a previous meeting, drew attention to the utter impossibility of any visiting physician engaged in active practice undertaking the sole medical charge of about a thousand persons, nearly half of the number being in hospital. Dr. Cremen's recommendation that additional medical assistance was required was not attended to, and consequently he considered, in the interests of the sick poor, that he ought to resign his post. After some discussion a resolution was adopted that Dr. Cremen should be asked to reconsider his determination, and that a week should be allowed him for the purpose.

COUNTY KERRY INFIRMARY.

The election of a temporary medical officer to this institution took place last week, there being two candidates, Messrs. Neligan and Fitzmaurice. Last year, on a vacancy being announced, the same gentlemen competed, the result being that Mr. Neligan was elected. The appointment was, however, challenged by his opponent, and an appeal was made to the Queen's Bench, who quashed the proceedings as being illegal owing to some of the governors not being duly qualified according to the Act of Parliament. At the meeting last week there were nine governors present but the chairman questioned the right of six of them, and refused to take an amendment, the consequence being that Mr. Fitzmaurice has replaced Mr. Neligan as medical officer of the infirmary.

MEATH HOSPITAL, DUBLIN.

During the summer session a course of lectures will be given to nurses and probationers in the theatre of this hospital by Mr. Ormsby, assisted by Dr. Moore. The management of surgical and medical cases, and the various duties belonging to the attendants of the sick, will be explained, and must prove of great service to those for whose benefit these lectures have been provided. I understand this is the first course of lectures of the kind ever delivered in a Dublin hospital.

CITY OF DUBLIN HOSPITAL.

During the past year nearly one thousand patients were treated in the wards, and upwards of ten thousand cases at the dispensary, in addition to several hundred extra accident cases. The mortality averaged 16 per cent. A new department in connexion with the hospital has been established for the purpose of training nurses for the sick in hospital, for the poor, and for private cases.

CORK SOUTH CHARITABLE INFIRMARY.

The annual report of this hospital for the past year shows that the average number of beds occupied was 71 per diem, while the extern patients numbered some 14,000. It is a subject of regret that a valuable and tried institution like the Cork South Charitable Infirmary should be hampered in its operations by want of funds, the trustees being compelled to open the present year with a debt of nearly £100.

Dublin, April 8th, 1884.

SUEZ.

(From a Correspondent.)

SINCE my last communication, the partially recovered cases have all been sent to Cairo, and 170 fresh cases have arrived from Suakim, of which only ninety were wounded. A great many cases of sunstroke, dysentery, and diarrhœa were among the sick. The sunstroke was not of a severe nature, and the dysentery seemed to yield readily to treatment. The wounds are not so severe as those of the first batch, and are nearly all due to swords and spears; a few bullet wounds have been admitted. The spears used are comparatively blunt; they are heavily weighted at the end, and are thrown by the natives with great force. The blow is sufficiently heavy to fracture long bones, and several such cases have been received. The men suffered a good

deal in being carried down the eighteen miles from the battle-field of Tamainet to the sea, as it was all stretcher-work. But they are now in good heart and full of spirits, and express themselves satisfied and pleased with the steps taken here for their comfort. The General and staff visited them the day after arrival, and inquired into all their cases. The weather continues very pleasant, the nights, mornings, and evenings being exceedingly cool and agreeable, so that life in a marquee is at present no hardship. On March 23rd there were about 160 in hospital, and during the last week no fresh arrivals have been admitted from the seat of war. The cases in hospital have been progressing very satisfactorily. Trumpeter Fanning, of the 19th Hussars, who was so severely wounded at El Teb with many sword-cuts over the shoulders and head, died of tetanus, and though all known depressed bone had been removed, yet after death plates of the inner table were found embedded in the brain and substance, both anteriorly and posteriorly, in places where the outer table had not been materially damaged beyond linear fracture. Three cases of secondary hæmorrhage have required the deligation of large arteries—namely, in two instances the femoral, and in one the carotid; the latter was tied to save a man from dying of hæmorrhage after repeated outbursts from the occipital artery in a wound caused by a back-handed sword-cut, which severed the parts from the outer angle of the left orbit to the transverse process of the atlas, dividing the ear, mastoid process, and muscles deep under the base of the skull; the man is doing well.

The Indian regiments stopped *en route* are now on their way home, and are expected here in H.M.S. *Jumna* on the 3rd prox., when all men in hospital sufficiently well to travel will join them and proceed home. Colonel Barrow (19th Hussars) is sufficiently recovered to be able to proceed to Cairo. Surgeons Prendergast and Cross have been invalided home, and will leave in a few days. Major Dalgety (65th Regiment) and Mr. Herbert at present remain under treatment.

March 30th, 1884.

ROYAL COLLEGE OF SURGEONS.

AT a quarterly meeting of the Council, held on Wednesday last, addresses of condolence to the Queen and the Duchess of Albany were agreed to; as also an address of congratulation to the University of Edinburgh on the completion of its 300th year of existence.

The report of the Museum Committee in reference to the appointment of a new conservator was adopted. It was recommended that the salary should be £600 per annum, with residence to be provided in the vicinity of the College. Advertisements will be published in the medical journals next week, and in the daily papers on the 19th instant. Candidates are invited to send in applications by the 3rd of May.

In consideration of Mr. Trimmer having completed twenty-five years of service to the College, and in recognition of his arduous duties in connexion with recent medical legislation, the Council resolved to present him with a sum of £500.

The Jacksonian Prize was awarded to Mr. Frederick Treves for the best essay on the "Pathology, Diagnosis, and Treatment of Obstruction of the Intestines in its various forms in the Abdominal Cavity."

A letter from the Home Secretary was read stating that in future no prosecution in which any member of the medical profession is concerned will be undertaken on behalf of the Crown without careful preliminary inquiry.

A letter from Mr. Tweedy, directing attention to the 7th Section of the Charter of the 15th Victoria relating to members of Council who at any time after their election may cease from the *bonâ-fide* practice of their profession, was referred to the President and Vice-Presidents to consider and report thereon to the Council at its next meeting.

It was resolved that the recommendations passed at the recent meeting of Fellows and Members should be taken into consideration at the same meeting, to be held on May 8th.

Sir James Paget gave notice that he would at the ensuing meeting move a vote of thanks to Dr. A. Farre for his presentation to the Museum of a large and valuable collection of water colour and other drawings left by his father, the late Dr. J. Richard Farre.

Obituary.

ALLEN THOMSON, M.D., F.R.S., F.R.S.E., LL.D., &c.

ALLEN THOMSON, one of the most distinguished anatomists and embryologists of his time, was born in Edinburgh on April 2nd, 1809. His father was John Thomson (originally of Paisley), one of the ablest and most learned physicians of his day, of great mark and influence in politics and science, and who filled in succession the chairs of Military Surgery and of Pathology in the University of Edinburgh. He was twice married. By the first marriage there were three children, of whom the only survivor after mature age was William Thomson (born July 2nd, 1802), who was appointed Professor of Medicine in the University of Glasgow in 1841. Of Dr. John Thomson's family by the second marriage two only outlived the age of childhood—a daughter and a son, Allen Thomson, the subject of the present notice.

Allen Thomson was named after John Allen, a distinguished physiologist and *littérateur*. He was educated at the High School of his native city, and afterwards studied medicine at the University of Edinburgh and at the medical schools of Paris. In August, 1830, he took the degree of Doctor of Medicine in the University of Edinburgh, when his graduation thesis, "On the Development of the Heart and Bloodvessels in Vertebrate Animals," was significant of the bent of his mind towards embryology, and foreshadowed the honourable distinction which he subsequently achieved in the developmental part of biology. He was from the beginning of his scientific career (unconsciously it may be said) a Darwinian of the best type; and the writer of this notice, and no doubt many others of his old students, can testify to his most interesting expositions of developmental theories long before they had become the fashionable teaching of the day. In 1831, as a necessary preliminary to his being qualified as a teacher, he obtained the Fellowship of the Royal College of Surgeons of Edinburgh, and became associated with the late Dr. William Sharpey during the sessions of 1831 and 1832 in a course of systematic lectures on anatomy and physiology, Dr. Sharpey teaching anatomy and Dr. Allen Thomson physiology. This association subsisted during the four following years (1832 to 1836) of Dr. Sharpey's stay in Edinburgh, who then became professor of Physiology in University College, London, and with whom Dr. Allen Thomson maintained a lifelong friendship of the most affectionate character, Dr. Sharpey being his senior by only seven years. "At this time a keen competition existed among the four teachers, who, in addition to the professors within the university, divided among them the students who applied for instruction." It was no light undertaking to become a teacher of anatomy in Edinburgh at that time. In 1828 a series of murders had been brought to light, effected by the notorious Burke and Hare for the money they would obtain for the bodies of the victims as material for the dissecting-rooms; and many years afterwards the public mind continued to be excited by the recollection of tragedies unprecedented in the history of mankind. In 1832 the Anatomy Act was passed, which made it possible to obtain and dissect the human body in a legal way.

In the university the third Munro filled the chair of anatomy, himself a good anatomist of the old school, who looked upon the new teachers with an easy disregard. But while Sharpey and Allen Thomson's class between 1831 to 1836 had increased from twenty-two to eighty-eight, the great bulk of the students flocked to listen to the brilliant, though egotistical, lectures of the famous Robert Knox, who in one year about this period had an extra-mural class numbering over 500 students. With unscrupulous virulence he brought his powers of ridicule and sarcasm to bear on all opponents, so that Allen Thomson and Sharpey came in for their full share. "About this time also a number of men, who afterwards became famous, were either students or extra-mural teachers—John Reid, the two Goodsirs (John and Henry), Edward Forbes, W. B. Carpenter, and John Hughes Bennett—all of whom become distinguished in biological science. In such an atmosphere of thought it is no wonder that Allen Thomson was encouraged to prosecute a purely scientific career."

When Dr. Sharpey removed from Edinburgh to London in

1836, Dr. Allen Thomson spent the autumns of 1836 and 1837 at Rothiemurchus, near Aviemore, with the Bedford family, and afterwards began a tour on the Continent, which continued for some years, with a member of the noble house of Bedford. In 1839 he was appointed Professor of Anatomy in the Marischal College and University of Aberdeen, which he resigned in 1841 to become once more a teacher of anatomy in the extra-mural school in Edinburgh. In that year Prof. Alison resigned the chair of Institutes of Medicine (physiology) in the University of Edinburgh, and in 1842 Dr. Allen Thomson was appointed his successor. The contest was severe with such formidable competitors as Robert Knox, John Reid, Hughes Bennett, and William B. Carpenter, who is now the only survivor. He held this professorship in Edinburgh for six years, when he was appointed, in 1848, to succeed Dr. James Jeffray in the chair of Anatomy in the University of Glasgow, a professorship which he held with great distinction for twenty-nine years, resigning it in 1877, when he was succeeded by its present distinguished occupant, Professor Cleland, who had been one of his demonstrators in previous years. During these thirty-five years he had the unique experience of being a professor in three out of the four Scotch universities, and in all of them he worked with an indefatigable industry, not merely in connexion with the immediate duties of his chair, but as a contributor to scientific literature. Thus it came to pass that his reputation as a teacher and man of science steadily increased; and at the end of his days he had become generally known throughout the scientific world as one of the most careful, judicious, accurate, and learned investigators and teachers of his favourite subjects. His earliest work brought him reputation as an embryologist; and herein lay his specialty; so that throughout his long and busy life he was constantly making important contributions to that department of science. Among these his memoirs "On the Development of the Vascular System in the Fœtus of Vertebrated Animals," in the *Edinburgh New Philosophical Journal*, 1830-31; his paper "On the Early Stages of Development of the Human Embryo," in the *Edinburgh Medical and Surgical Journal*, 1839; together with his memoirs "On the Origin of Double Monsters," in the *Edinburgh Monthly Journal of Medical Science*, 1844—brought him his earliest reputation in embryology. His observations, however, were morphological rather than physiological—that is to say, they had more to do with the evolution of form than the development of function, thereby indicating that Dr. Allen Thomson's mind inclined rather to the anatomical than to the physiological side of biology. It was in the field of embryology that he won his laurels; and although his name may not be associated in the history of that science with any one great discovery (although he contributed many new facts), yet he will always be regarded as having done much, perhaps more than anyone else in this country, to make this difficult department of biological science familiar to British naturalists. He directed his attention to it when few in this country did so, and did much by clear and accurate description to make intelligible the writings of the German embryologists. Throughout life he worked hard to keep pace with the rapid progress of embryological science, and no one rejoiced more at the attention given to it by a rising school of British embryologists, nor mourned more deeply the sad death on the Alps of its leader, the late Francis M. Balfour of Cambridge. He was one of the first also to bring under the notice of British physiologists the researches of Weber on the tactile sensibility of the skin, and he wrote largely for the "Cyclopædia of Anatomy and Physiology," edited by Todd and Bowman. The articles on "Circulation," "Generation," and "Ovum," are from his pen, and to the past and current editions of the "Encyclopædia Britannica" he contributed the articles on those and other kindred subjects. The article "Ovum" in the forthcoming volume of the latter work has been prepared by him, and over it he worked to the end with ardent love and care. He also wrote on physiological optics, more especially on the mechanism by which the eye accommodates or focuses itself for objects at different distances; and his name has long been associated with current editions of Quain's "System of Human Anatomy," as editor especially of the descriptive parts of the seventh and eighth editions. In the seventh edition he was associated with Professors Sharpey and Cleland, in the eighth with Professors Sharpey and Schäfer, and in the ninth and last edition with Professor Schäfer and Professor Thane, both of University College, London. Alike with pen and pencil Dr. Thomson made important additions to their great work, especially "An Outline of the Development of the Fœtus." He also edited a second edition of his father's life of Cullen. To the Royal Societies of Edinburgh and London, and British and Foreign medical journals, he contributed numerous special papers and articles. The Royal Society list contains the title of about twenty papers by him.

During his distinguished career Dr. Allen Thomson received many scientific honours. He was elected a Fellow of the Royal Society of Edinburgh in 1838, and of the Royal Society of London in 1848. After his removal to London from Glasgow in 1877, he became first a Councillor of the Royal Society, and ultimately one of the Vice-Presidents. He was President of the Philosophical Society, of the Medico-Chirurgical Society, and of the Science Lectures Association in Glasgow, in which city he was also the first President of the Local Branch of the British Medical Association. For eighteen years he was a member of the General Medical Council for the Universities of Glasgow and St. Andrews jointly, from 1859 to 1877, where his ripe experience and calm judgment enabled him to do good service to the cause of medical education. In 1871 he was President of the Biological Section of the British Association at the meeting in Edinburgh; and in 1876 the Association conferred on him its highest honour by electing him to the Presidential chair. At the meeting at Plymouth in 1877, his calm, farseeing, and philosophical address on his favourite topic, "The Development of the Forms of Natural Life," was a masterly history of the gradual acceptance of the doctrines connected with the name of Darwin, whose important generalisations his open and receptive mind had long before accepted. In 1871 Dr. Allen Thomson received from his university the degree of LL.D., a degree which was also conferred upon him by the Glasgow University in 1877.

In 1882 he received the degree of D.C.L. from the University of Oxford; and latterly he was elected to at least one Syndicate of the University of Cambridge to assist in the election of professors to the biological chairs. Whilst thus pursuing a purely and steadfast scientific career, Dr. Allen Thomson was well known as one of the most active and influential men in the city of Glasgow. Always ready to aid in any good cause, he took a prominent part in various great public undertakings, especially as chairman of the Removal and Buildings Committee of the University of Glasgow from 1863 to 1874, which led to the erection of the University buildings on Gilmore-hill; and it is not too much to say that the carrying out of this great scheme was largely due to his energy and tact. Keenly alive also to the interests of the medical school of the university, and to the growing needs of the west end of the city and suburbs, Dr. Allen Thomson took an active part in the erection of the Western Infirmary; and it is well known that he was especially proud of having been connected with those two great undertakings.

The friendly hand who wrote the obituary notice in the *Glasgow Herald*, from which much of this memoir has been compiled, has given the following characteristic word-picture of Dr. Allen Thomson: "He took a deep interest in almost all departments of science. He was a ready listener, and always delighted to hear an account of a new investigation. Eager in the pursuit of truth himself, he, above all things, demanded accuracy. He was critical in all questions, and it required a great deal of fact and argument to lead him to a change of scientific opinion. Yet his mind was open and receptive, and he did not shrink from a change of view although it went against his preconceived notions. His own writings are models of clearness of statement and skilful marshalling of facts. Dr. Allen Thomson's mode of teaching was of the same character. Method, order, precision of statement, and close reasoning shone in every lecture; while there was also the persuasive eloquence of a great enthusiasm which captivated the listener."

As a teacher he was equalled by few and surpassed by none of the many colleagues amongst whom he taught. His education and surroundings made him a teacher, and to that work he bent all his energies. Those only who have been associated with him as demonstrators of anatomy in his dissecting-rooms can appreciate the daily labours he went through in preparing and arranging the material for his lectures. Personally he was much beloved by his students, who are generally remarkable for devotion to a teacher who takes pains to teach as he did. "In the social circle there was much gentleness and simplicity of manner, along with a keen sense of humour, while his domestic life

throughout was characterised by a quiet kindliness, and that chivalrous attention to little details of personal courtesy which mark the true gentleman."

On his retirement from the University of Glasgow in 1877 his portrait, painted by the President of the Scottish Academy of Arts, the late Sir Daniel Macnee, was presented by his friends and admirers to the university, and it now hangs in the Hunterian Museum, to hand down to future generations the cherished features of the man.

Dr. Thomson has left a widow and an only son, Mr. John Millar Thomson, lecturer on Chemisiry in King's College, London, and Secretary to the Chemical Society of London. Up to within four months of his death Dr. Thomson appeared to be in excellent health, and looked forward to the pleasure of being in Edinburgh at the approaching tercentenary. Last year he went with his wife to Cannes, on Jan. 3rd, and spent the cold months and spring there, and the summer was passed in the West Highlands of Scotland, with much pleasure in revisiting scenes with which he had been so familiar in earlier days. Suddenly, on December 14th, from his house in London, he wrote to say that his left eye had not been quite so well of late, and that Mr. John Couper and Sir William Bowman both concurred in the opinion that an iridectomy should be performed without delay. Accordingly, on the following day Mr. Couper did an iridectomy on the left eye, on account of glaucoma. Nothing could have been more satisfactory than his recovery from the operation. The wound healed without pain, vision was maintained, and normal tension restored. About ten to fourteen days after the operation he began to experience lancinating pain referred to the ears and base of the skull, which he attributed to the east wind and rheumatism, as there was no change in either eye to account for the pain, and no external swelling. He woke in the morning to find that he had been struck blind of the right eye (which up till that moment had been perfect). Mr. Couper saw him forthwith, and found the tension normal, and there was a considerable area of the field of vision blind, the limit coming close to the centre; and he could only distinguish large letters. Next day the main branch of the arteria centralis was seen to be plugged with blood-clot, and the portion of vessel beyond the plug empty, and for many weeks vision was entirely lost. From this it was feared that other arteries might be similarly plugged in adjoining parts. Dr. George Johnson also saw him with Mr. Couper and Mr. Aikin, and found the cardiac valves were sound. It was thus probable that the vessels became plugged owing to degeneration of their coats at the plugged part. Gradually the plugging process seems to have extended, and about the fourth month after the illness began some local paralyses became developed, first in the left hand thumb and forefinger, which passed away, and afterwards in the muscles of the right side of the face; the vagus also became implicated, so that hiccough was more or less constant, relieved only by chloroform. His strength was reduced by protracted suffering, and eventually breathing became obstructed. He died at 66, Palace-gardens-terrace, W., on March 22nd, 1884, in the seventy-fifth year of his age; and as he wrote of his friend Sharpey, so it may be written of himself: "He had not a single enemy, and he numbered among his friends all those who ever had the advantage of being in his society." His memory will long be cherished in the hearts of thousands of his pupils at home and abroad, alike in civil and in military life.

THE SERVICES.

Deputy Surgeon-General Thompson has proceeded from Aldershot to Dublin, having been promoted to the post of Principal Medical Officer of that district.

INDIA OFFICE.—The Queen has approved the retirement from the service of Deputy Surgeon-General John James Clarke, M.D., of the Bengal Army, and Surgeon-Major Robert Crossing Thorp, M.D., of the Bombay Army.—To be Deputy Surgeon-General: Brigade Surgeon Benjamin Williamson, of the Madras Army.

ADMIRALTY.—Staff Surgeons William Dudley Wordsworth and Alexander McDonald, M.D., have been promoted to the rank of Fleet Surgeon in Her Majesty's fleet.

The following appointments have been made:—Surgeon Robert F. Yeo, to the *Decoy*, vice Lightfoot; Surgeon John Wilson, M.D., to Sheerness Dockyard, vice Lynch; Surgeon J. B. Clibborn, to Plymouth Hospital, vice Wilson; Surgeon James Porter, M.B., to the *Euryalus*, additional, for Marine Battalion in Egypt; Surgeon William Thompson, to the Portsmouth Division of the Royal Marines, vice Porter; James W. Green, to be Surgeon and Agent at Aldborough, vice E. F. S. Green, resigned.

MEDICAL NOTES IN PARLIAMENT.

The Lunacy Laws.

IN the House of Lords, on Friday, the Earl of Milltown gave notice that on the 6th of May he will call attention to the observations made by Baron Huddleston in the case of Weldon *v.* Winslow, and move, "That in the opinion of this House the existing state of the Lunacy Laws is eminently unsatisfactory, and constitutes a serious danger to the liberty of the subject."

School-pressure.

On the motion of Lord Norton, it was agreed to publish a copy of recent correspondence between the Education Departmental Council and the National School Teachers' Association on the subject of over-pressure in schools.

In the House of Commons, on Friday, a London petition was presented by Sir Charles Dilke for the amendment of the Lunacy Laws.

Insane British Subjects Abroad.

Mr. W. Corbet asked the Secretary of State for the Home Department whether he could find out how many British subjects who were insane, or alleged to be insane, had been conveyed away from the United Kingdom and confined in lunatic asylums in foreign countries during the past ten years, and whether any of the survivors were now of sound mind.—Sir W. Harcourt said he was informed by the Lunacy Commissioners that there were no facts from which his question could be answered. He himself could not see how the facts were to be obtained.

Irish Medical Officers of Health.

Mr. Trevelyan stated, in reply to Mr. W. Corbet, that there was no objection to giving a return of paid officials under the Public Health (Ireland) Act. He was informed that in some instances guardians had declined to pay their medical officers of health for services performed under the Labourers Act, stating that they considered that such services were within the medical officer's ordinary duty. One officer concerned was taking proceedings against a board of guardians, and he could not prejudice the case by expressing an opinion as to whether or not there was a ground of action.

On Monday the London Hospital Bill (Lords) was read a second time.

Select Committees.

On Tuesday, upon the motion of Dr. Cameron, a Select Committee was appointed to inquire into the efficiency of the Commissariat and Transport Services during the late war in Egypt. Dr. Cameron gave notice that on the 21st instant he will move to add the name of Dr. Farquharson to the Committee, it having been inadvertently omitted from the original motion.

On the motion of Mr. Shaw Lefevre, a Select Committee on the Charity Commission was also appointed.

The School Question.

Mr. Samuel Smith gave notice that on going into Committee on the Education Estimates he will move: "That, in view of the many complaints of over-pressure on children in our elementary schools, it is desirable to give greater prominence to physical and gymnastic exercises; and also that, in view of the great amount of destitution in our large towns, and the difficulty of finding employment for our fast-growing population, it is desirable to give some industrial training to the young, so that they may be better fitted in after-life to earn a living either at home or in the new countries of the world."

Ambulance Drill.

Mr. Gourley gave notice that on the 22nd inst. he will ask the Secretary of State for War if he will consider whether the officers and men in each regiment of the Army might be systematically instructed in ambulance drill, and how to

treat the sick and wounded in the absence of medical assistance.

Home Lessons.

Mr. Salt gave notice that on the 25th inst. he will question the Vice-President of the Council respecting the death of Rachael Gibbons of Egham, concerning whom the coroner's jury is reported to have returned a verdict that "the deceased died from inflammation of the brain produced by overwork at school and lessons at home;" and as to any regulations to control the amount of home lessons that children of tender years may be required to perform.

The Indian Medical Service.

Mr. Gibson gave notice that on Friday, May 9th, he will call attention to the grievances of the Indian Medical Service, and move a resolution.

The House adjourned until the 21st inst. for the Easter recess.

Medical News.

ROYAL COLLEGE OF SURGEONS OF ENGLAND — The following gentlemen passed the Primary Examination in Anatomy and Physiology at meetings of the Board of Examiners on the 3rd, 4th, 7th, and 8th inst:—

T. A. Barton, Cambridge and St. George's Hospital; E. Teichelmann, J. A. James, W. R. Jordan, F. J. J. Orton, and T. W. Fowler, Birmingham; S. Tordoff, A. S. Barling, and W. Porritt, Leeds; H. F. Semple, H. A. Burleigh, A. H. Joseph, W. M. Barclay, R. J. Marks, and C. E. S. Flemming, Bristol; W. G. Holloway, A. S. Wilson, E. H. Douty, T. Redmayne, W. K. Sibley, H. W. Dumergue, E. C. Perry, C. W. Daniels, and R. M. Brown, Cambridge; R. J. McL. Buchanan, Liverpool; B. G. Sumpter and A. F. Bradbury, Newcastle-on-Tyne; E. H. Wright, S. C. Phillips, H. George, H. J. Macevoy, H. Duncan, T. E. Stuart, Charles Brown, and H. Pennel Hawkins, St. Thomas's Hospital; A. H. Gault, G. Braide, T. W. Iddon, W. H. Tomlinson, F. J. Wheeldon, A. Greenhalgh, C. F. Cheetham, J. E. Thompson, David Owen, and W. P. Stocks, Owens College; M. C. Moxham, H. Johnson, Wilfred Balgarnie, W. H. B. Brook, P. A. Houghton, C. F. Williamson, G. E. Deacon, A. J. Gore, M. O. Manson, F. G. Engelbach, O. C. P. Evans, and C. A. Parker, St. Bartholomew's Hospital; H. Smith and D. J. Mantre, London Hospital; A. S. Taylor, A. Scott, E. R. Davies, H. E. Crook, and F. S. Hawkins, Guy's Hospital; C. Drinkwater and F. W. Jollye, King's College; G. A. Barton, St. Mary's Hospital; H. J. Wheeler, St. George's Hospital; J. Watson and E. Cautwell, Westminster Hospital, A. W. F. Noyes, Melbourne; H. P. Zieman, F. W. Abbott and C. P. Oliver, Charing-cross Hospital.

ROYAL COLLEGE OF SURGEONS IN IRELAND. — At a recent meeting of the Court of Examiners, the undermentioned gentleman was admitted a Fellow of the College:—

George Despard Twigg, Surgeon, R.N.

APOTHECARIES' HALL. — The following gentlemen passed the examination in the Science and Practice of Medicine, and received certificates to practise, on April 3rd:—

Cooper, Charles Bolingbroke, Oakhill-park, Stonеycroft.
Johnson, Obadiah, Hastings, Sierra Leone.
Jones, Thomas, Columbia-road, Hackney-road.
Newton, Sidney Frederick, Long-acre.
Nunn, John Robert, Repton, Burton-on-Trent.
Swindlehurst, Thomas Newton, Newington-crescent.
Tovey, Reginald Samuel, Royal York-crescent, Clifton, Bristol.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.—The library of this Society will be closed from Good Friday to Easter Monday, both days inclusive.

THE inauguration of the Port of London new hospital at Gravesend, erected by the City Corporation, will take place on Thursday, the 17th inst.

A FIRE broke out on the 3rd inst. in the store of the Glasgow Royal Infirmary. Fortunately no person was injured, and the damage done was comparatively slight.

THE death of Mr. Wells, L.S.A., of Cricklade, is reported. The deceased gentleman is stated to have taken cyanide of potassium whilst in a state of depression arising from serious pecuniary losses.

THE new hospital buildings at Stratford-on-Avon, provided by the princely munificence of Mr. W. B. Gibbins and his sister, are rapidly approaching completion, and will shortly be open for the reception of patients.

ADULTERATION OF BREAD.—On Monday, a baker was indicted at the Boston Quarter Sessions for adulterating bread with alum to the extent of 50 grains per 4 lb. loaf, and was sentenced to imprisonment with hard labour for one month.

THE amount received in respect of the Manchester Hospital Sunday Fund up to the 5th inst. was £4666 6s. 4*d.*, and of the Hospital Saturday Fund £2883 14s. 2*d.*, making a total of £7550 0s. 6*d.*

TRINITY COLLEGE, DUBLIN: MEDICAL SCHOOL.—At the prize examinations in Medicine and Midwifery the following were successful:— Practice of Medicine: Louis Werner (first prize); J. T. Bourchier-Hayes (second prize). Midwifery: J. T. Bourchier-Hayes (first prize); Alexander S. Patton (second prize).

ROYAL COLLEGE OF SURGEONS IN IRELAND: MEDICAL SCHOOL.—The following prizes were awarded at the termination of the winter session:—Honours list in the Anatomy Class: Third year, H. F. Thornbury (medal), Second year, S. Long (medal). First year, J. Cremin (medal).

THE CITY ORTHOPÆDIC HOSPITAL.—The report of this institution, read at the annual meeting on Monday, describes the last year's work of the charity as the most satisfactory of any in its history. The total income had been £1569; the debt, which had long embarrassed the committee, had been paid off, leaving a balance in hand; and four rooms had been repaired and furnished for the reception of twelve additional patients.

A CHILDISH JOKE.—On April 1st, messages were delivered at the houses of some half-dozen medical men of Plymouth requesting their attendance on patients in various parts of the town, in some cases naming the hour for the consultation, and in others requesting immediate attention. When the houses were visited, it was discovered that no illness existed, and that the medical men had been called away from patients who really needed them, and whose lives might have been endangered by their absence to gratify the mischievous humour of some stupid miscreant.

UNSOUND FROZEN AND TINNED MEAT. — The Sanitary Committee of the Port of London in a recent report remark on the increased trouble and responsibility falling upon their officers in connexion with the supplies of imported meat, preserved either by tinning or by freezing processes. In one case no fewer than 3388 frozen carcases of sheep were discovered on board a vessel in an unsound condition and unfit for food. In another case 2200 cases of tinned meats were seized on like grounds. Several other similar instances are given.

CITY OF LONDON HOSPITAL FOR DISEASES OF THE CHEST.—The thirty-fifth anniversary festival in aid of the funds of this institution was held on the 3rd inst. It was stated that during the past year the in-patients had numbered 881 and the out-patients 15,381. For the ordinary annual expenditure £10,000 is required, but the reliable receipts from annual subscriptions &c. amount to only £3500. The secretary read a list of subscriptions amounting to £3008 12*s.*, including nearly £1000 contributed by working men's societies in the neighbourhood of the hospital.

THE ST. ANDREWS AMBULANCE ASSOCIATION OF GLASGOW. — The annual meeting of this Association took place on March 31st, and it is still doing good work. During the past year nearly 400 injured persons were removed to hospital in the Association's waggons; while the classes conducted in various parts of the city have been attended by 540 pupils. Ladies' ambulance classes have been established, and have proved very successful; it is intended to develop the operations of the Association still further in this direction. Arrangements have been made also by which all the neighbouring smaller towns will be brought into co-operation in the ambulance movement.

THE POLICE AND AMBULANCE WORK. — The Commissioner of Metropolitan Police has forwarded to the Central Executive Committee of the St. John Ambulance Association a report of a most effective case of "first aid to the injured" rendered by Police Constable Thomas Pearson, 112 B, who was awarded a certificate last year after attending the classes at Albany-street police station. It appears that a man was found by the constable in the Buckingham-palace-road suffering from hæmorrhage caused by the bursting of a varicose vein. Pearson immediately took steps to arrest the bleeding, and afterwards conveyed the man to the Westminster Hospital, where it was stated that had these precautions not been taken the man would probably have bled to death.

Medical Appointments.

Intimations for this column must be sent DIRECT *to the Office of* THE LANCET *before 9 o'clock on Thursday Morning at the latest.*

BRADY, J. B. J., L.K.Q.C.P.I., L.M., L.R.C.S.I., formerly Honorary Medical Officer to the Liverpool North Dispensary, has been transferred to the South Dispensary in that town.

BROWN, V. E., M.B., has been appointed Honorary Physician to the Benevolent Asylum, Melbourne.

EDINGTON, J. E., M.R.C.S., has been appointed Medical Officer for the Brandes Burton District of the Skirlaugh Union.

EDIS, ARTHUR W., M.D.Lond., F.R.C.S., has been appointed Obstetric Physician to the Middlesex Hospital, vice John Hall Davis, M.D., deceased.

HASLAM, GEORGE JAMES, M.D., has been appointed Honorary Physician to the Hulme Dispensary, Manchester, vice George Bowman, M.D., resigned.

LUNDY, L. F., M.R.C.S., L.S.A.Lond., has been reappointed Medical Officer for the Sunbury District of the Staines Union.

PUGHE, T. W. O., M.B.Lond., M.R.C.S., has been appointed Honorary Medical Officer to the Liverpool North Dispensary.

STARTIN, JAMES, M.R.C.S., has been appointed Honorary Consulting Surgeon to the Sheffield Public Hospital for Skin Diseases.

TOVEY, R. N., L.R.C.P.Ed., L.F.P.S.Glas., has been appointed Medical Officer for the Knightwick District of the Martley Union.

WESTBY, GEORGE, M.K.Q.C.P.I., L.R.C.S.I., &c., has been appointed Honorary Assistant-Surgeon to the Liverpool Hospital for Cancer and Skin Diseases.

WHOLEY, T., L.R.C.P.Lond., M.R.C.S., has been appointed Resident Accoucheur to the London Hospital.

Births, Marriages, and Deaths.

BIRTHS.

ALEXANDER.—On the 2nd inst., at Paignton, the wife of Jas. Alexander, M.D., T.C.D., of a daughter.

BLACKETT.—On the 7th inst., at Wangford, Suffolk, the wife of Edward Ralph Blackett, M.D., of a daughter.

DILLON-KELLY.—On the 28th ult., at Earl-street, Mullingar, the wife of J. Dillon-Kelly, L.R.C.P.Ed., of a daughter.

FISHER.—On the 2nd inst., at King's Langley, Herts, the wife of F. C. Fisher, F.R.C.S., of a son.

MACLAREN.—On the 3rd inst., at 23, Portland-square, Carlisle, the wife of Roderick Maclaren, M.D., of a son.

POPE.—On the 3rd inst., at South Hayling, Hants, the wife of Percy Pope, M.R.C.S., L.R.C.P., of a son.

MARRIAGES.

COBBETT—BIRD.—On the 3rd inst., at the Church of St. John the Divine, Richmond, Surrey, Dr. Charles Newberry Cobbett, of Edinburgh, elder son of the late Robt. Newberry Cobbett, M.R.C.S., of Albury, Australia, to Katherine Emily Stonehouse, younger daughter of Hugh Stonehouse Bird, of Lichfield-gardens, Richmond, Surrey, and Southerndown, Glamorganshire.

DENHAM—HOLMES.—On the 3rd inst., at Rutland-square Church, Dublin, John Knox Denham, L.R.C.S.I., to Celia Mary, eldest daughter of Dr. Holmes, of Eccles-street.

NORRY—TOOBY.—On the 3rd inst., at the Parish Church, Epsom, William Augustus Norry, M.B., M.R.C.S., of Epsom, to Annie Jane, youngest daughter of the late Henry Norten Tooby, Esq.

ROBINSON—RIPPON.—On the 2nd inst., at the Parish Church, Stanhope, by Bishop Ryan, D.D., Rector, assisted by the Rev. J. Cosbey, Curate, William Robinson, M.S., M.B., M.R.C.S., to Eleanor, eldest daughter of the late Valentine Rippon, J.P., of Rogerley Hall, Frosterley.

DEATHS.

BEST.—On the 6th inst., at Bilston, Henry Dewes Best, M.R.C.S., J.P., aged 51.

CHOWN.—On the 4th inst., at Terowie, South Australia, Joseph W. Chown, M.B., elder son of the Rev. J. P. Chown, of Bloomsbury Chapel, in his 33rd year.

GRACE.—On the 23rd Jan., at West Melbourne, J. F. Grace, M.D., aged 63.

GRANT.—On the 2nd inst., at Rehoboth-place, Dublin, John Grant, M.D., F.R.C.S.I.

NIVEN.—On the 6th inst., at Udny House, Teddington, after protracted illness, David Graham Niven, F.R.C.S., aged 72.

N.B.—*A fee of 5s. is charged for the Insertion of Notices of Births, Marriages, and Deaths.*

BOOKS ETC. RECEIVED.

BAILLIÈRE, TINDALL, & COX, London.

The Influence of Heredity and Contagion on the Propagation of Tuberculosis. By Herr A. Lydtin, G. Fleming, LL.D., F.R.C.V.S., and M. Van Hertsen. pp. 175.

BEMROSE & SONS, London.

Elementary Physiology. By G. T. Bettany, M.A. &c. pp. 160.

CHURCHILL, J. & A., London.

Injuries and Diseases of the Jaws. By Christopher Heath, F.R.C.S.Eng. Third Edition. pp. 480. With Illustrations.

On the Treatment of Spinal Curvatures by Extension and Jacket. By H. Macnaughton Jones, M.D., M.Ch. pp. 127. Illustrated.

Ambulance Handbook for Volunteers and Others. By J. A. Raye, L.K.Q.C.P.I. &c. pp. 138. With 16 Plates.

FANNIN & Co., Dublin.

The Descriptive and Surgical Anatomy of the Inguinal and Femoral Regions, considered in Relation to Hernia. By E. L'E. Ledwich. pp. 92. With Coloured Lithograph.

GREVEL, H., London.

Corpulence and its Treatment on Physiological Principles. By Dr. W. Ebstein. Translated from the Sixth German Edition by Prof. A. H. Keane, B.A. pp. 89.

JOHNSTON, W. & A. K., Edinburgh.

Atlas of Female Pelvic Anatomy. By D. Berry Hart, M.D., F.R.C.P.E.

LEWIS, H. K., London.

Post-nasal Catarrh, and Diseases of the Nose causing Deafness. By Edw. Woakes, M.D.Lond. Being Vol. I. of the Third Edition of "Deafness, Giddiness, and Noises in the Head." pp. 212.

LONGMANS, GREEN, & Co., London.

The Gold-headed Cane. Edited by Wm. Munk, M.D., F.S.A. pp. 246.

PUTNAM'S SONS, New York & London.

A Year-book of Surgery for 1883. Edited by C. H. Knight, M.D. pp. 193.

A Year-book of Therapeutics for 1883. Edited by R. W. Amidon, M.D. pp. 250.

REDWAY, GEORGE, London.

Prostitution under the Regulation System, French and English. By Yves Guyot. Translated from the French by E. Beckit Truman, M.D. pp. 348. With 25 Diagrams.

WOOD, W., & Co., New York.

A Treatise on Bright's Disease of the Kidneys. By Henry B. Millard, M.D. pp. 246. With Illustrations.

Index Medicus, Index to Vol. V.—Veins of the Brain, and its Envelopes; by Wm. Browning, M.D., Brooklyn.—A Case of Extra-uterine Fœtation; by W. Dunnett Spanton, F.R.C.S.Ed.—Proceedings of the Naval Medical Society, Washington.—The School of Mines Quarterly.—The Early Days of the Human Race; by T. F. I. Blaker, M.R.C.S.—Clinical Lectures on Important Symptoms: Giddiness; by Dr. T. G. Stewart.—Thoughts on the Interdependence of Water and Electricity, and Cognate Subjects: Index Medicus, Vol. VI., No. II.—Fumifugium: A Popular Lecture on the Laws of Health; by F. H. V. Grosholz, M.K.Q.C.P.I.—A Review of the Operation of Gastrotomy for Myo-fibromata of the Uterus; by Horatio R. Bigelow, M.D.—The Nervous Mechanism of Hypnotism; by Gerald F. Yeo, M.D.—Cassell's Technical Educator, Part 1.—Address in State Medicine; by T. W. Grimshaw, M.D.—The Effects of Certain Anatomical Relations by Jas. Cantlie, M.B., F.R.C.S.—Good Words, Sunday Magazine for April.—Boy's Own Paper, Girl's Own Paper, Leisure Hour, Sunday at Home for April.—Longman's Magazine, April.—The Link, April.—Impressions of a Visit to Bad-Homburg.—Employment of Women in the Public Service; by Lady John Manners.—Vivisection in its Scientific, Religious, and Moral Aspects; by E. D. Girdlestone, B.A. (Simpkin, Marshall, & Co.)—Medical Thoughts of Shakespeare; compiled by B. Rush Field, M.D.—Hints on Sanitary Law; by G. F. Chambers, F.R.A.S.—Where shall I get the most for my Money? by J. Allen, F.S.S.—De la Prophylaxis et le Traitement abortif et resolutif de l'Amygdalite simple par le Bicarbonate de Soude; par le Dr. J. G. Partagás.—A Few Practical Hints for Travellers in the Tropics; by Ralph Leslie, M.D.—A Lecture on the Essential Requisites for Seaside Health Resort; by Alfred Haviland.—Is it Nothing to You? by the Rev. H. Rowley. (Hamilton, Adams, & Co.)—Medical Annals of Baltimore from 1608 to 1880; by J. R. Quinan, M.D.

METEOROLOGICAL READINGS.

(Taken daily at 8.30 a.m. by Steward's Instruments.)

THE LANCET OFFICE, April 9th, 1884.

Date.	Barometer reduced to Sea Level and 32° F.	Direction of Wind.	Dry Bulb.	Wet Bulb.	Solar Radia in Vacuo.	Max. Temp. Shade.	Min. Temp	Rain fall.	Remarks at 8.30 a.m.
April 4	29·59	S.W.	51	48	105	63	48	·06	Cloudy
,, 5	29·38	S.W.	52	49	95	56	47	·11	Cloudy
,, 6	29·56	S.	52	50	101	60	46	..	Cloudy
,, 7	29·49	N.	47	47	..	56	45	·32	Raining
,, 8	29·92	W.	49	46	80	62	44	·06	Cloudy
,, 9	29·98	E.	54	47	97	59	47	..	Hazy

Notes, Short Comments, and Answers to Correspondents.

It is especially requested that early intelligence of local events having a medical interest, or which it is desirable to bring under the notice of the profession, may be sent direct to this Office.

All communications relating to the editorial business of the journal must be addressed "To the Editor."

Lectures, original articles, and reports should be written on one side only of the paper.

Letters, whether intended for publication or private information, must be authenticated by the names and addresses of their writers, not necessarily for publication.

We cannot prescribe, or recommend practitioners.

Local papers containing reports or news-paragraphs should be marked.

Letters relating to the publication, sale, and advertising departments of THE LANCET *to be addressed "To the Publisher."*

THE DETECTION OF ADULTERATION IN PARIS.

THE great services rendered by the Municipal Analytic Laboratory, recently established in Paris, are clearly shown by the criminal returns just published. Naturally adulteration is more extensively practised in the great metropolis than in the country, and a large proportion of the articles adulterated in the provinces are brought to Paris to be sold either for local consumption or for foreign exportation. The disclosures made at the Municipal Laboratory, however, enabled the authorities to obtain 1134 convictions in 1880, 784 in 1881, and 637 in 1882; and this is equivalent to a reduction of 44 per cent. in three years. Of course this fact does not warrant the assumption that adulteration is less prevalent in exact proportion with these encouraging figures. Something may be said for the increased skill of those who seek to avoid detection, and perhaps also the investigations have not been conducted with the same energy as formerly. New brooms proverbially sweep clean; nevertheless, even if we allow a liberal discount for all these considerations, there still remains a broad margin which we may consider as the demarcation of a solid improvement.

Mr. Eberstadt (Zurich) is referred to a general notice at the head of this column.

TREATMENT OF BURNS AND SCALDS.

To the Editor of THE LANCET.

SIR,—Having had considerable experience in the treatment of burns and scalds among engineers, firemen, and children, I send you a simple and, as all the sufferers have maintained, efficacious method of cure. At first I used the soda solution, followed by carron oil, but soon abandoned them as unsatisfactory. The former owes its reputation to the cold water, and not to any soothing property in the soda. My invariable practice, however extensive the scald, has been to place the injured member in ice cold water, keeping it there till all pain has disappeared—say in from two to four hours, or even longer. The water heats rapidly, and must be kept cold either by ice or constantly renewing. As long as the scalded part is kept under water (provided it is cold enough) no pain is complained of, and symptoms of shock are much lessened. When the limb will bear removal from the water without pain, I lay on thickly lead acetate and resin ointment (one drachm to one ounce), and envelope in cotton wadding. I have used this ointment also in erysipelas with the best results, all symptoms of inflammation rapidly disappearing. Should severe suppuration occur, instead of the lead acetate a few drops of creasote may be added to the resin ointment, as recommended by Druitt. By this treatment pain and shock are reduced to a minimum, opiates are seldom required, and danger to life is, I believe, greatly averted.—I am, Sir, yours, &c.,

Edinburgh, April 4th, 1884. C. F. NAISMITH, L.R.C.P. Edin.

SOME VITAL STATISTICS OF ST. PETERSBURG.

FROM a consular report recently published, it seems that at the examination of recruits for the Russian army during 1882, of 1000 candidates examined, 460 were rejected as being "too narrow chested," 50 had pulmonary tuberculosis, and 10 "poverty of blood." On the whole 57·5 per cent. were rejected for physical disability. It was found that over 50 per cent. of the young men of St. Petersburg between twenty and twenty-two years of age were "weak and sickly." Of the population of the city, 2000 were affected with bodily infirmities; 771 were blind; 707 deaf or dumb, or both; 188 without arms; and 282 without legs. Blindness was twice as common among women as men, but the latter show a large proportion of cripples. Of the 771 blind, 134, and of the 707 deaf and dumb, 409, cases were congenital.

"HARDNESS" OF HEARING IN CHILDREN.

DR. GELLÉ, of Paris, has discovered that about 20 to 25 per cent. of school children can only hear within a limited range. It has also been noticed that the poorer classes of children are specially liable to this affection, the fact being explained by the want of attention to trifling ailments of the ear. In France a practical result has ensued from the above observations, it having been arranged for children to be placed at a distance from the teacher's desk which would correspond with the strength of their hearing.

Mr. T. R. Allinson, L.R.C.P.—We hope at some future date to refer at length to the points alluded to by our correspondent.

"WASHING OUT THE BLADDER, &c."

To the Editor of THE LANCET.

SIR,—The interesting communication of "Number Thirteen" must greatly interest all those who have similar cases under their care, and the details to which he alludes must prove very useful, as they are not such as are found in most text-books, and are the result of experience in *corpore vili*.

It is not, however, given to every patient to be able to pass a catheter for himself; a protuberant abdomen, an abbreviated penis, and an elongated prepuce—as is not unfrequently found in prostatic disease—entirely preclude the operation being performed by the patient. In this event such duty falls on the surgeon. Such a case has been under my care for several years, and I may add a little to the experience of "Number Thirteen." As to lubricants, I have tried almost all I can think of, but the most satisfactory I find to be, thanks to a letter in the columns of THE LANCET, the very best castor oil that can be procured. In washing out I use an ordinary glass funnel adjusted to an indiarubber tube, a size larger than the red rubber catheter. By raising this up the water freely flows into the bladder, and makes its exit as easily on depressing it. I occasionally use a drachm of boracic acid to sixteen ounces of warm water, but more frequently simply boiled carefully filtered water. I have frequently observed the belching of air referred to by your correspondent, and my patient always expresses relief on its exit; and I am decidedly of opinion that no small part of the distension of the bladder, and consequent discomfort, are due to the pressure of flatus in that organ, and I am unaware of any reason why the decomposition which urine must undergo in an incompletely emptied bladder should not generate flatus as well as the same process in another closed organ. Before I used castor oil as a lubricant the patient had some swelling of the testicles; since then he has had none, and the catheter passes far more easily than before. Hoping my experience may prove of use to my brethren and their patients,

I am, Sir, yours faithfully,

Rugby, April 3rd, 1884. J. INGLEBY MACKENZIE, M.D. Cantab.

Dr. E. Holland.—Will our correspondent kindly forward the MS.?

Enquirer.—No such Society is known to us.

"DETERMINATION OF SEX."

To the Editor of THE LANCET.

SIR,—There can be no doubt that females, both of man and other animals, having only one ovary are capable of producing both male and female offspring, but it is very doubtful whether the female ever produces any other than a female germ. It is highly probable that the male furnishes the male germ and the female the female germ. This is rendered likely by the consideration of the impossibility of the female providing from her own economy the male peculiarities and the male supplying the female characteristics, especially in those animals in which the masculine and the feminine differences are well marked. The female supplies probably germs like herself, but provided with a fund of nourishment, whilst the male furnishes germs with cilia or locomotive apparatus for enabling them to make their way to the female production. When once combined they resemble what is so general in vegetable and early forms of animal life, an organism composed of male and female elements. The determination of the sex is the result of the survival of the fittest, the most fit ultimately obtaining the complete mastery, but not to the entire exclusion of the weaker elements. The above considerations have an important practical bearing on the question of the determination of sex. I am, Sir, yours truly,

Clapham, April 6th, 1884. SIGMA.

THE PRESENCE OF ANTIMONY IN CLOTHING.

THE *Centralblatt für Textil Industrie* records the fact that antimony is to be found in cotton yarn which has been dyed with aniline colours, and remarks that unless great care has been taken in the cleansing of the yarn, it is possible for such a quantity to remain as to be injurious to the skin. Experiments made on different classes of yarn produced results varying according to the nature of the dyeing substance. The samples in which hot water acted as a dissolvent showed only a small proportion of antimony, the highest proportion found being 0·014 per cent. The proportions of antimony which were soluble in muriatic acid varied from 0·035 to 0·31 per cent. of the weight of the yarn. Of course, practically speaking, only the portion soluble in water comes under consideration, but as a pair of long cotton stockings weighs about two to two and a half ounces, the antimony would represent an appreciable, though minute, quantity, the effect of which is a question, it is remarked, for medical experts to decide.

CHILD-BEARING EXTRAORDINARY.

THE following pathetic notice appeared in the *Glasgow Herald* of April 1st:—

"Scott.—At 7, Burnside-street, on the 29th ult., the wife of Dan. Scott was safely delivered of triplets—two boys and one girl, all doing well, this making seven of a family in four years and seven months, Mrs. Scott having given birth twice to twins. August 29th, 1879, twins; October 21st, 1881, twins; March 29th, 1884, triplets."

Mr. Ed. G. Bulleid had better apply at the Office of the Crown Agents for the Colonies, Downing-street, S.W.

FRACTURE OF RIGHT FEMUR, WITH DISLOCATION OF RIGHT SHOULDER, IN AN OLD LADY.

To the Editor of THE LANCET.

SIR,—The following case affords an instance of remarkable vital power in an aged patient.

Elizabeth T——, in her eighty-first year, living in a village near Wisbech, went out with her daughter to spend the day at the seaside, some thirty miles away. Soon after she reached Hunstanton she had the misfortune to slip down a flight of steps leading to the sands, falling a considerable distance. Finding that she could not get up, they conveyed her to a room close by, and as soon as possible by train to Wisbech, and then home, a further distance of two miles, in a Bath-chair. The next morning they sent for medical advice. On my arrival I found that she had not only sustained a fracture of the right femur at the junction of the middle and lower third, but also a subcoracoid dislocation of her right humerus. There was preter-mobility of the leg, marked crepitation, and shortening to the extent of about two inches. The dislocation did not give much trouble, the head of the humerus readily going into the glenoid cavity on extension of the arm with my foot in the axilla. Not having a splint with me, I temporarily put up the thigh, and in the afternoon, with my brother, I placed the leg permanently in a M'Intyre's splint, and enjoined her to remain in bed. Although she was in the humblest circumstances of life, and also was subjected at the time to a good deal of rough treatment, yet during the whole time she scarcely showed any unfavourable symptoms, and in six weeks I removed the M'Intyre's splint, and replaced it by stout pasteboard splints, which she wore another ten days, getting up for a short time daily. At the end of eight weeks, with the aid of a stick, she was able to get round her table, and since then has gradually gained confidence, strength, and power of progression, and about five months after her accident was able to walk a distance of four miles, pulling with her a low four-wheeled perambulator, and scarcely walking lame. The femur readily united, and there is no perceptible shortening. The shoulder also did well, and now she can use both her arm and leg freely.—I am, Sir, yours, &c.,

April, 1884. H. GROOM, B.A., &c.

AN APPEAL.

To the Editor of THE LANCET.

SIR,—I venture, through the columns of THE LANCET, to ask the aid of the profession in the following case. Dr. Wilson, late of Yoxford, Suffolk, after practising in that village for forty-seven years, and having had a very large practice, died in 1843, leaving his widow and four children very badly off. Two children are dead; one (a son) has, unfortunately, gone utterly to the bad; a daughter remains, aged thirty-seven, who is always more or less ill, suffering from a weak heart and general debility. Mrs. Wilson has also very bad health, and is sixty-seven years of age. They live on £35 a year, being the rent of a house, and the charity of some few non-medical friends, whom death is gradually removing year by year. Dr. Wilson on one occasion was summoned to London by George IV. to treat him for an attack of gout, he having a great reputation for curing that disease. His Majesty recovered, but Dr. Wilson received no fee, being only offered a knighthood, which he refused. The family live in a house tumbling about their ears, which is their own property, but of course they cannot afford to repair it. Their furniture is nearly all gone, and they are quite incapable of earning any money themselves. My object is to collect enough money to buy an annuity of £25 on the daughter's life and also to repair the house. I shall be glad to receive any contributions towards a fund for that purpose.

I am, Sir, yours truly,

H. A. COLLINS, M.R.C.S., &c.

Saxmundham, Suffolk, April 7th, 1884.

SUPPRESSION OF HOSPITAL CHAPLAINCIES IN FRANCE.

M. DESPREZ, surgeon to the Hôpital de la Charité, has written to the *Journal des Débats* to state his experience of the working of recent legislation, by which all persons connected with religious bodies are excluded from the Paris hospitals. Himself a Republican and a free-thinker, he nevertheless emphatically condemns the new order of things. The lay assistants who now take the places of the sisters of charity at the bedside of the sick are, he declares, far less efficient than the nurses who have been displaced, and he condemns the whole system of secularisation which comprises the suppression of hospital chaplaincies as contrary to the interests of the poor.

Mr. E. Day.—Our correspondent's letter somewhat misses the point. The proposal of Dr. Hickman contemplated the union of the Royal Colleges not simply for the purposes of holding a conjoint examination, but with the object of instituting such an examination and granting degrees in medicine and surgery.

Hirudo.—A small pamphlet on the subject has just been published by Hamilton, Adams, and Co. Its author is the Rev. Henry Rowley, who seems on the whole to have treated the question discreetly. We know of no leaflet that could be used for the purpose mentioned by our correspondent.

"THE AIR TAMPON."

To the Editor of THE LANCET.

SIR,—In reply to Messrs. Matthews' letter, I beg leave to state that since I described my dilatable air tampon for deep-seated hæmorrhage after lithotomy, in THE LANCET in 1877, many surgeons of the highest repute have written to me expressing their unqualified approval of the instrument, and I do not know of any standard work on the surgical diseases of the urinary organs published since 1877 in which it has not been described; showing that up to that date surgeons still needed an efficient and practicable lithotomy tampon. Personally, I had never heard of Messrs. Matthews' instrument until after the publication of my paper, when my friend, Mr. Royes Bell, drew my attention to it. I at once called on Messrs. Matthews, and the result of our interview was that in a reprint of my paper, distributed during 1877, I appended the following postscript:—

"After the publication of this paper, my attention was drawn to the fact that in 1873, Messrs. Matthews Brothers, of Carey-street, had designed an instrument similar in principle to mine, though differing somewhat in shape, into which they proposed to introduce ice-cold water. Although their instrument and mine seem, at first sight, to be much alike, there is an essential difference between them. In mine the bleeding is controlled by firm air pressure; in theirs, more importance seems to be attached to the temporary application of cold. Two objections to this latter plan at once suggest themselves: first, the dead weight of the water in the bag is likely to prove distressing; and, secondly, the advantages of the application of cold are nullified by the fact that, unless the water be frequently changed, its temperature is soon raised by the heat of the adjacent parts. Furthermore, the instrument of Messrs. Matthews has no muslin or other envelope, a contrivance which not only prevents over-distension of the bag, but obviates the slipperiness of indiarubber in a bleeding wound."

I am, Sir, yours faithfully,

Wimpole-street, W., April 5th, 1884. G. BUCKSTON BROWNE.

H. M. F.—We are glad to know that remarks of ours, penned not only in good temper, but with a sincere desire to help the victims of "insanity" everywhere, have produced good fruit in *some* States of America.

"THE PINK FUND."

To the Editor of THE LANCET.

SIR,—I must ask your forbearance whilst I trespass once more on your time and space to give the result of the appeal in this case. In response to the appeal you so kindly inserted for me in your issues of Feb. 9th and 23rd a sum of about £50 has been received, and from other sources the fund has been increased to the amount given below. I wish to take this opportunity of thanking you for your kindness in finding room for the appeals, &c. I am, Sir, your obedient servant,

Petersfield, April 4th, 1884. B. J. FORDER.

The amount of subscriptions received is £195 12s. 6d., which has been expended as follows:—Clothing, £4 17s. 6d.; cash advanced to Mr. Pink, £5; purchase of an annuity of £40 per annum, £172; cash paid into the Post Office Savings Bank for Mr. Pink's funeral expenses, when required, £13 15s.

Interested will find the information in THE LANCET of April 5th.

Mr. Lingard's request shall have attention.

Mr. W. J. Spence.—Soon.

GUNPOWDER MARKS.

To the Editor of THE LANCET.

SIR,—Would you or any of your readers kindly suggest any remedy for the black disfiguring marks in the face produced by the explosion of gunpowder? I am, Sir, yours, &c.,

April 8th, 1884. M.D.

Mr. Pugin Thornton.—Probably Dr. W. R. Smith's Lectures on Nursing, second edition, would answer the purpose.

COMMUNICATIONS not noticed in our present number will receive attention in our next.

COMMUNICATIONS, LETTERS, &c., have been received from—Sir Henry Thompson, London; Sir E. Lechmere, London; Dr. Barr, Liverpool; Mr. J. P. Mearns, St. Helens; Mr. Groom, Wisbech; Mr. W. Barker, London; Mr. Hobson, London; Mr. Pugin Thornton; Mr. Mellin, London; Mr. Robson, Leeds; Dr. Holland, London; Mr. A. Hind, South Molton; Mr. Charles Hawkins, London; Mr. Bulleid, Norton; Dr. J. Hardie, Manchester; Dr. Dalgado, Bombay; Mr. W. Rendle, London; Mr. Butlin, London; Mr. Spence, Bradford; Dr. Blackie Smith, Aberdeen; Mr. N. E. Davies, Sherborne; Dr. More Madden, Dublin; Mr. W. Collier, Hastings; Dr. Spearing, Shaw; Mr. Forder, Petersfield; Dr. Robert Bell, Glasgow; Dr. Wilson, Cheltenham; Mr. C. S. Taylor, London; Mr. George Smith, Axbridge; Mr. Laffan, Cashel; Mr. Buckston Browne, London; Dr. Hughlings Jackson, London; Mr. Reckitt, Madras; Mr. Kinder, Leicester; Dr. Wallis, Missouri, U.S.A.; Mr. Sunderland, London; Messrs. Wood and Co., New York; Messrs. Dawson Brothers, Montreal; Mr. Crewes, Truro; Dr. Jones, India; Mr. Curtice, Yeovil; Mr. Gill, Sowerby-bridge; Mrs. Pratt, Cardiff; Mr. F. Jordan, Birmingham; Miss Dwyer, Newbury; Mr. Johnston, Edinburgh; Mr. Alexander, Paignton; Dr. Denton, Brixton; Messrs. Beal and Co., Brighton; Mr. Monsall, Manchester; Mrs. Theobald, Leicester; Messrs. Ulbrich, Bohemia; Messrs. Smith and Son, Manchester; Messrs. Robinson and Co., Norwich; Mr. Jackman, Coggeshall; Mr. Chayne; Messrs. Forder and Co., Wolverhampton; Messrs. W. and A. K. Johnstone, Edinburgh; Mr. Gamgee, Birmingham; Messrs. Macmillan and Co., Cambridge; Mr. Partridge, Upwell; Dr. M'Ciaron, Carlisle; Mr. Whitehead, Nottingham; Mr. Grant, Birmingham; Mr. Maythorne, Biggleswade; Mr. R. Freeman, London; Mr. Hodgson, London; Mr. Robertson, Liverpool; Mr. Pentland, Edinburgh; Mr. Macdougall, Carlisle; Surgeon-Major Slimmon, Woolwich; Mons. P. Bossano, Marseilles; Dr. Sweeting, London; Dr. Andrew, London; Mr. Henry Smith, London; Mr. Allinson; Mr. A. E. Barker, London; Mr. Charles Day; Mr. W. G. Dickinson; Dr. Strahan, Belfast; Dr. Gibson, Edinburgh; Mr. Knowles, Burton-upon-Trent; Medicus, Huddersfield; Hirudo; H. M. F., Simsville; An Enquirer; Bishop, Woking; Sigma; &c. &c.

LETTERS, *each with enclosure*, are also acknowledged from—Mr. Barff, Leytonstone; Mr. Johnston, Basingstoke; Mr. Austin, Faversham; Mr. Taylor, Buxton; Mrs. Annan, Taunton; Messrs. Keith and Co., Edinburgh; Mr. Armstrong, Manchester; Mr. Williams, Port Isaacs; Mr. Coward, Huddersfield; Mr. Litchfield, Kensington; Dr. Pope, Haling; Mr. Dressius, Strasburg; Dr. Allen, Shanghai; Mr. Spencer, Sheffield; Mr. T. Turner, London; Miss Rymington, Nottingham; Mr. Haywood, Manchester; Mr. Skelton, Downend; Mr. Menzies, Glasgow; Mr. Joy, Northallerton; Mr. Beatty, Stockton-on-Tees; Mr. Abbott, Sheffield; Mr. Delathehan, Holloway; Mr. Robinson, Darlington; Mr. Boys, Beverley; Mr. Birch, Newbury; Mr. Lister, Cardiff; Mr. Hopkins, Camberwell; Messrs. Potts and Co., London; Mr. Taylor, Nottingham; Dr. Day, Millam; Mr. Taylor, Buxton; M. E.; C. G.; Medicus, Stow-on-the-Wold; M.R.C.S.; C. S., Malvern; Zeta, Alfreton; Medicus, Newbury; C. W., Cattron; E. E., London; Medicus, Halifax; Hercules; X. Y. Z., London; M.R.C.S., Camden-town; Medicus, Darley; Ozone, Leeds; F. N. D., Gainsborough; Physician, Pontefract; G. F., Camden-town; C. S. H.; &c. &c.

Westminster and Lambeth Gazette, Diamond Fields Advertiser, Waltham Abbey and Cheshunt Weekly Telegraph, Buffalo Express, Sunderland Daily Echo, Western Morning News, Preston Guardian, &c., have been received.

Medical Diary for the ensuing Week.

Monday, April 14.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10½ A.M. each day, and at the same hour.
ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1½ P.M. each day, and at the same hour.
METROPOLITAN FREE HOSPITAL.—Operations, 2 P.M.
ROYAL ORTHOPÆDIC HOSPITAL.—Operations, 2 P.M
ST. MARK'S HOSPITAL.—Operations, 2 P.M.; on Tuesday, 9 A.M
HOSPITAL FOR WOMEN, SOHO-SQUARE.—Operations, 2 P.M., and on Thursday at the same hour.

Tuesday, April 15.

GUY'S HOSPITAL.—Operations, 1½ P.M., and on Friday at the same hour. Ophthalmic Operations on Mondays at 1.30 P.M., and Thursdays at 2 P.M.
WESTMINSTER HOSPITAL.—Operations, 2 P.M.
WEST LONDON HOSPITAL.—Operations, 2.30 P.M.
PATHOLOGICAL SOCIETY OF LONDON.—8.30 P.M. The following specimens will be shown:—Cirrhosis of the Liver; Abscess of the Brain; Carcinoma of the Larynx; A Stomach Constricted in Two Places; Hour Glass Contraction of Stomach (card); Multiple Strictures of the Small Intestine; Ulcer, with Hepatic Abscess; Duodenal Ulcer (card); Congenital Tumour of Back; Cancer of Gall-bladder (card); Dissection of Stump (card); Separation of Epiphysis of Fibula (card); Enchondroma of Lung (card); Diphtheria of Larynx (card).

Wednesday, April 16.

NATIONAL ORTHOPÆDIC HOSPITAL.—Operations, 10 A.M.
MIDDLESEX HOSPITAL.—Operations, 1 P.M.
ST. BARTHOLOMEW'S HOSPITAL.—Operations, 1½ P.M., and on Saturday at the same hour.—Ophthalmic Operations on Tuesdays and Thursdays, at 1.30 P.M.
ST. MARY'S HOSPITAL.—Operations, 1½ P.M.—Skin Department: 9.30 A.M., on Tuesdays and Fridays.
ST. THOMAS'S HOSPITAL.—Operations, 1½ P.M., and on Saturday at the same hour.
LONDON HOSPITAL.—Operations, 2 P.M., and on Thursday and Saturday at the same hour.
GREAT NORTHERN HOSPITAL.—Operations, 2 P.M.
SAMARITAN FREE HOSPITAL FOR WOMEN AND CHILDREN.—Operations, 2½ P.M.
UNIVERSITY COLLEGE HOSPITAL.—Operations, 2 P.M., and on Saturday at the same hour.—Skin Department: 1.45 P.M., and on Saturday at 9.15 A.M.

Thursday, April 17.

ST. GEORGE'S HOSPITAL.—Operations, 1 P.M
ST. BARTHOLOMEW'S HOSPITAL.—1½ P.M. Surgical Consultations
CHARING-CROSS HOSPITAL.—Operations, 2 P.M.
CENTRAL LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M., and on Friday at the same hour.
NORTH-WEST LONDON HOSPITAL.—Operations, 2½ P.M.
HARVEIAN SOCIETY.—8.30 P.M. Dr. D. B. Lees, "Note on a Form of Diarrhœa in Children."—Dr. T. Robinson, "On Acne Rosacea."

Friday, April 18.

ST. GEORGE'S HOSPITAL.—Ophthalmic Operations, 1½ P.M.
ST. THOMAS'S HOSPITAL.—Ophthalmic Operations, 2 P.M.
ROYAL SOUTH LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M.
KING'S COLLEGE HOSPITAL.—Operations, 2 P.M.
CLINICAL SOCIETY OF LONDON.—Dr. de Havilland Hall, "Sequel to a Case of Perichondritis of the Larynx."—Dr. Percy Kidd, "A Case of Tubercular Tumours of the Larynx."—Mr. Harrison Cripps, "Cases of Excision of the Rectum for Cancer."—Dr. Angel Money, "A remarkable Case of Tubercular Meningitis."

Saturday, April 19.

KING'S COLLEGE HOSPITAL.—Operations, 1 P.M.
ROYAL FREE HOSPITAL.—Operations, 2 P.M.

SUBSCRIPTION.

POST FREE TO ANY PART OF THE UNITED KINGDOM.

One Year.....	£1 12 6	Six Months.....	£0 16 3
TO CHINA AND INDIA.....		One Year	1 16 10
TO THE COLONIES AND UNITED STATES ..		Ditto	1 14 8

Post Office Orders should be addressed to JOHN CROFT, THE LANCET Office, 423, Strand, London, and made payable at the Post Office, Charing-cross.

Notices of Births, Marriages, and Deaths are charged five shillings.

Cheques to be crossed "London and Westminster Bank."

ADVERTISING.

Books and Publications .. .. .. — ..	£0 5 0
Official and General Announcements	0 5 0
Trade and Miscellaneous Advertisements	0 4 6
Seven lines and under (each averaging ten words).	
Every additional Line	0 0 6
Front Page .. .. per Line	0 1 0
Quarter Page .. .. .. —	1 10 0
Half a Page	2 15 0
An entire Page	5 5 0

The Publisher cannot hold himself responsible for the return of testimonials, &c., sent to the office in reply to advertisements; copies only should be forwarded.

NOTICE.—Advertisers are requested to observe that it is contrary to the Postal Regulations to receive at Post-offices letters addressed to initials only.

An original and novel feature of "THE LANCET General Advertiser" is a special Index to Advertisements on page 2, which not only affords a ready means of finding any notice, but is in itself an *additional* advertisement.

Advertisements (to ensure insertion the same week) should be delivered at the Office not later than Wednesday, accompanied by a remittance.

Answers are now received at this Office, by special arrangement, to Advertisements appearing in THE LANCET.

Terms for Serial Insertions may be obtained of the Publisher, to whom all letters relating to Advertisements or Subscriptions should be addressed.

Advertisements are now received at all Messrs. W. H. Smith and Sons' Railway Bookstalls throughout the United Kingdom, and all other Advertising Agents.

Tables of Contents, with the Index of Advertisements, for each Number can be had on application to the Publisher.

Agent for the Advertising Department in France—J. ASTIER, 66, Rue Caumartin, Paris.